TALLY HO MAJOR ACTIVITY CENTRE
URBAN DESIGN FRAMEWORK

Prepared for the City of Whitehorse by MGS ARCHITECTS

CONTENTS

VOLUME 1

Executive Summary Page 1

1. Introduction Page 1
   - 1.1. Background
   - 1.2. Purpose of the Urban Design Framework
   - 1.3. Effect of Study on Future Development
   - 1.4. The Study Area
   - 1.5. Why is the Urban Design Framework being done?
   - 1.6. Urban Design Framework Consultant Team
   - 1.7. Strategic Document Review

   Drawing 1.1: Study Area

2. Strategic Context Page 3
   - 2.1. Context and Role
   - 2.2. Economic Sustainability
   - 2.3. Environmental Sustainability
   - 2.4. Social Sustainability
   - 2.5. Planning Controls

   Drawing 2.1: Activity Centres and Principal Public Transport Network Plan

   Drawing 2.2: Relationship of Tally Ho MAC to significant nearby facilities

3. Physical Context Page 5
   - 3.1. Heritage
   - 3.2. Identity
   - 3.3. Land Use and Ownership
   - 3.4. Built Form and Density
   - 3.5. Interfaces
   - 3.6. Community Context and Community Facilities
   - 3.7. Open Space, Connectivity and Linkages
   - 3.8. Streetscapes
   - 3.9. Traffic and Parking

4. Community & Stakeholder Consultation Page 7
   - 4.1. Consultation Program
   - 4.2. Consultation Key Findings
     - 4.2.1. Community Context and Community Facilities
     - 4.2.2. Traffic and Parking
     - 4.2.3. Open Space, Connectivity & Linkages
     - 4.2.4. Streetscapes & Landscaping
     - 4.2.5. Built Form and Density
     - 4.2.6. Land Use

5. Activity Centre Objectives & Strategies Page 8

   Vision Statement
   - 5.1. Identity + Knowledge
     - 5.1.1. Economic Sustainability
     - 5.1.2. Built Form and Density
   - 5.2. Sustainability
     - 5.2.1. Environmental Sustainability
     - 5.2.2. Transport and Car Parking
   - 5.3. Vitality
     - 5.3.1. Open Space, Connectivity & Linkages
     - 5.3.2. Streetscapes and Landscapes
     - 5.3.3. Land Use & Zoning
   - 5.4. Community

6. Key Site Guidelines Page 10

7. Investment & Implementation Page 11

Drawings Pages 12-27

Drawing 3: Land Use
Drawing 4: Planning Scheme Zoning
Drawing 5: Built Form & Density
Drawing 6: Social Context
Drawing 7: Open Space, Pedestrian Linkages & Landscapes
Drawing 8: Public Transport & Bicycle Network
Drawing 9: Traffic & Parking
Drawing 10: General Strategies for the Study Area
Drawing 11: Strategies: Global Television Studios
Drawing 12: Strategies: Burvale Hotel
Drawing 13: Strategies: Tally Ho Business Park
Drawing 14: Strategies: Crossway Baptist Church
Drawing 15: Strategies: East Burwood Reserve
Drawing 16: Strategies: Crown Coaches, Peter James Centre & Hewlett Packard

VOLUME 2

Appendices

Appendix 1: Traffic Engineering Assessment, Traffix Group (September 2006)
Appendix 2: Traffic Engineering Assessment – Supplementary Report, Traffix Group (September 2006)
Appendix 3: Tally Ho Urban Design Framework – Report of community consultation session feedback, IUM (December 2004)
Appendix 4: Community Feedback to the Exhibition Draft of the Urban Design Framework, City of Whitehorse (October 2006)

EXECUTIVE SUMMARY

The Tally Ho Major Activity Centre (MAC) is both a regional hub for high tech commerce and a centre for the local community. To ensure that Tally Ho meets the needs of the local worker and residential population, an Urban Design Framework has been prepared which sets out objectives and strategies that will guide development in over the next 15 years. The key objectives of the Framework are:

- To encourage economic development based on new generation commerce and knowledge.
- To facilitate growth and development to meet current and future needs whilst maintaining amenity and liveability.
- To create a sustainable urban environment.
- To encourage use of alternate modes of transport (i.e. other than privately-owned motor vehicles) by improving the extent and quality of bicycle and pedestrian networks and enhancing public transport infrastructure.
- To reduce at-grade car parking in the area.
- To increase the mix of uses in existing and new developments.
- To ensure community facilities can meet the current and future needs of the local population.
- To enhance the quality and extent of landscaping.

Aerial photograph of study area

1.0 INTRODUCTION

Abbreviations Used in This Document
Burvale= Burvale Hotel
Business Park= Tally Ho Business Park
Crossway= Crossway Baptist Church
MAC – Major Activity Centre
Reserve= East Burwood Reserve
UDF – Urban Design Framework

1.1 BACKGROUND

The City of Whitehorse is committed to supporting the role of Tally Ho as a Major Activity Centre as it becomes a focus for development over the next few years. Major Activity Centres like Tally Ho are to be developed as 'hubs' for shopping, business, working and leisure, as well as being a focus for additional residential and civic development. A strategy was developed with the Council to identify and involve community representatives and stakeholders to shape the content and direction of the framework process.

1.2 PURPOSE OF THE URBAN DESIGN FRAMEWORK

An Urban Design Framework (UDF) is a strategic planning tool that provides physical interpretations of local visions and strategies. It focuses on managing change and setting new directions for integrated development of the urban environment.

1.3 EFFECT OF STUDY ON FUTURE DEVELOPMENT

The Urban Design Framework aims to establish a sustainable medium and long term role for the study area, capitalising on economic and social opportunities within the study area as a whole, and improving the physical appearance, infrastructure and amenity.

1.4 THE STUDY AREA

Refer Drawing 1 on page 2

The Tally Ho Major Activity Centre includes key community and commercial landholdings, in an area extending 800 m along Springvale Road and Burwood Highway. The study area extends beyond these key landholdings to include the residential areas between Hawthorn Road to the north and Highbury Road to the south. The Route 75 Tram Corridor along Burwood Highway is within the study area inclusive of 3 stops.

1.5 WHY IS THE URBAN DESIGN FRAMEWORK BEING DONE?

The identification of Tally Ho as a Major Activity Centre in Melbourne 2030: Planning for Sustainable Growth necessitated the preparation of an urban design framework for the area known as Tally Ho. This process seeks to understand the needs of all stakeholders; to direct change based on a collective community vision in response to emerging needs, issues, opportunities and desired future identity, development and use.

1.6 URBAN DESIGN FRAMEWORK CONSULTANT TEAM

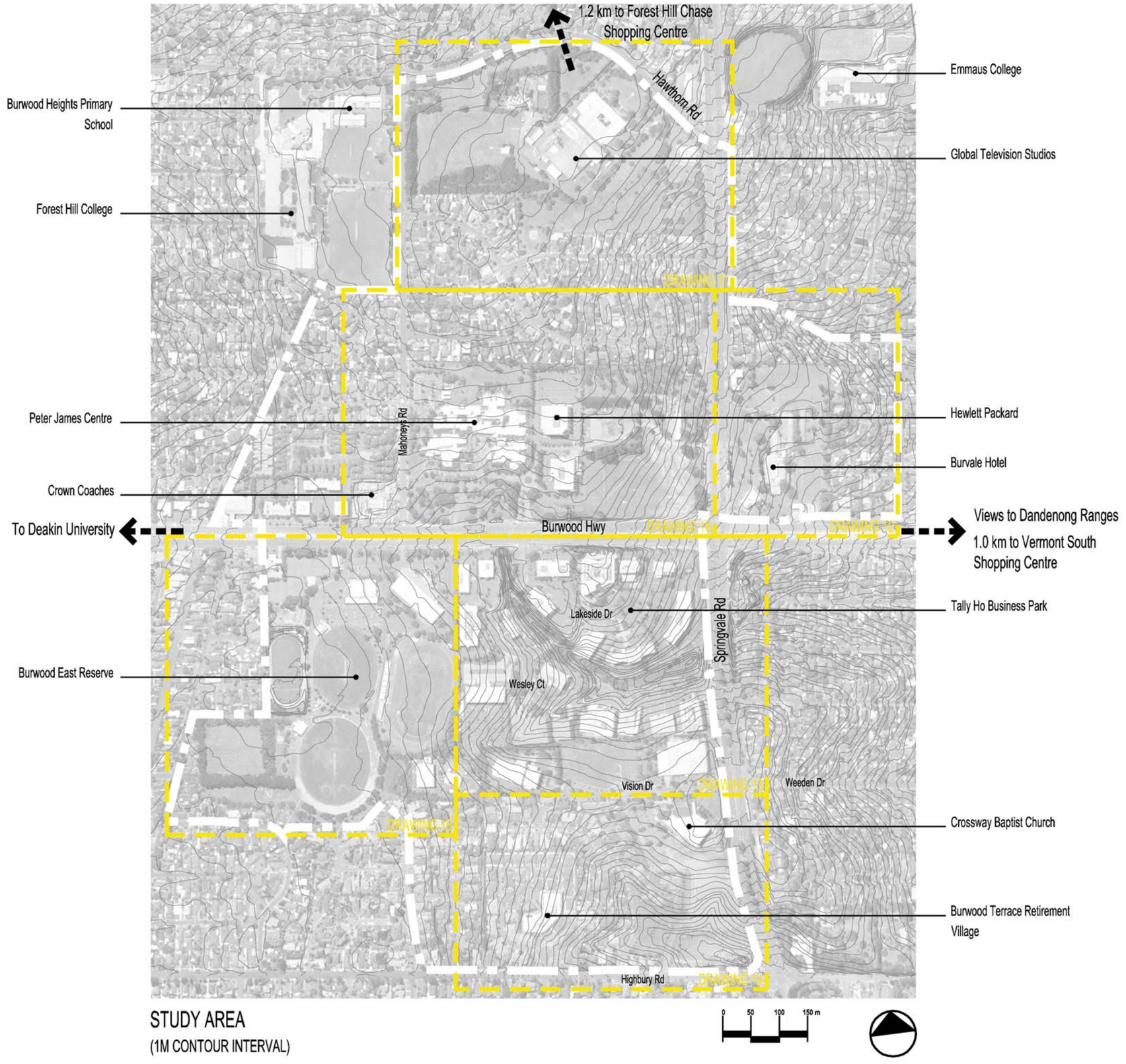
The process is being coordinated by MGS Architects with progress monitored by a steering committee comprised of key officers of the City of Whitehorse, representatives from Department of Sustainability and Environment and Vic Roads, and the consultant team.

The team of consultants involved in advising Council with the preparation of the Urban Design Framework include:

- Architecture Urban Design Planning: MGS Architects
- Strategic Planning & Activity Centre Development: Planning by Design
- Traffic Transportation: Traffix Group
- Graphic Design: Emery Frost

1.7 STRATEGIC DOCUMENT REVIEW

A review has been made of the existing Strategic and Statutory Planning context that currently informs decision making for the Activity Centre. In addition, demographic, heritage, neighbourhood character, housing, open space, community services, traffic and car parking have informed the UDF together with relevant structure plans.



STUDY AREA
(1M CONTOUR INTERVAL)

2.0 STRATEGIC CONTEXT

2.1 CONTEXT AND ROLE

Refer Drawing 2.1 on page 3 & Drawing 2.2 on page 4

Tally Ho has been designated as a Major Activity Centre (MAC) in Melbourne 2030 and is one of four MAC's within the City of Whitehorse (along with Burwood Heights, Forest Hill and Nunawading/MegaMile). The Deakin University Specialist Activity Centre is located 5 km to the west whilst the Glen Waverley Principal Activity Centre is situated 2 km to the south. The Tally Ho MAC is located approximately 19 km from Melbourne's Central Activity District and is centred on the intersection of 2 major arterial roads, the Burwood Highway and Springvale Road. The Belgrave/Lilydale and Glen Waverley metropolitan railway lines are located 3 km to the north and south respectively.

The Department of Sustainability and the Environment has indicated that the primary role of the Tally Ho MAC should remain office and business although mixed use development should be facilitated where appropriate and/or where it is already a characteristic of the area. A range of decisions and changes have occurred in recent years in the region with implications for this area with the expansion of Deakin University, Eastlink and the extension of the Burwood Highway tram service offering opportunities for enhanced regional linkages and benefits and implications for competition, growth and expansion.

2.2 ECONOMIC SUSTAINABILITY

Tally Ho is recognised as a key eastern suburbs hub for knowledge workers. In order to strengthen business development, innovation and the continued broadening of employment opportunities the Tally Ho MAC must continue to maintain and attract higher order employment. This could be supported by the formation of links, both physical and organisational, between educational institutions such as Deakin University and leading edge businesses located within the Tally Ho MAC. The Tally Ho MAC is characterised by business and commercial activity but competes for investment with adjacent Activity Centres that demonstrate a greater range of uses and services. The major areas of growth in the area are likely to be in business employment and associated infrastructure, hospitality, hotel, and associated neighbourhood convenience retail with housing growth site specific and likely to be targeted to local needs. Emerging needs that require consideration include encouraging sustainable transport, attracting new business, improving the quality of local services and facilities, coordinating the development of vacant land, and guiding the redevelopment solutions for sites where buildings have reached obsolescence or fail to optimise their land utilisation, use and integration.

2.3 ENVIRONMENTAL SUSTAINABILITY

When it was first developed the Tally Ho Business Park was pioneering in its approach of integration of built form with landscape. Similarly significant canopy trees once lined Springvale Road and the Burwood Highway. However in recent years motor vehicle traffic and at-grade parking have been given precedence at the expense of landscaping and vegetation. There is an opportunity for the Tally Ho MAC to reinstate its reputation for being a leader in environmentally sustainable development. Hewlett Packard has pre-empted this initiative with the proposed development of a 4-star energy-rated building for their state headquarters in the Tally Ho MAC.

2.4 SOCIAL SUSTAINABILITY

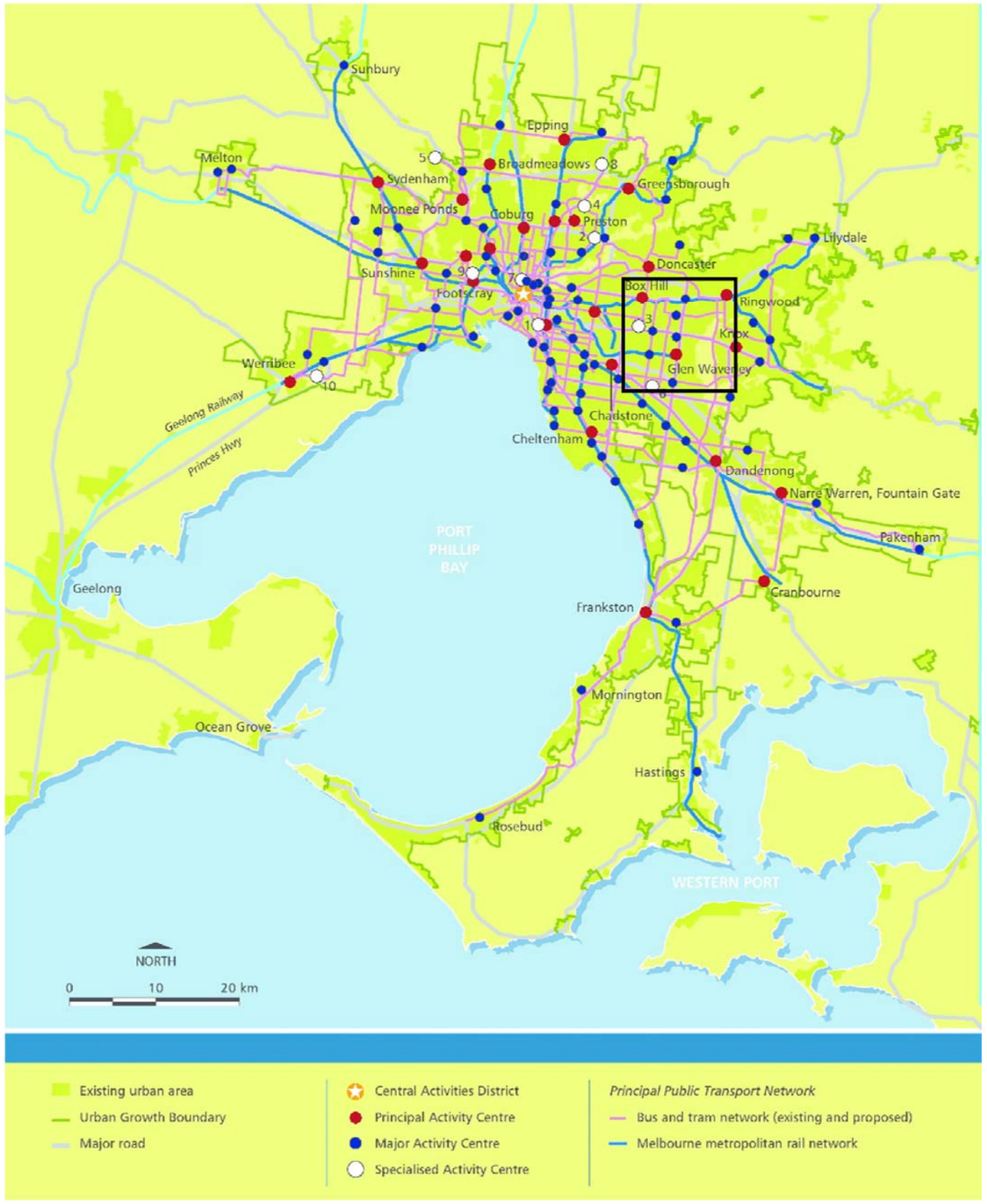
Future change and development in the Tally Ho MAC must cater to the needs of both its worker and resident population. Workers in the area are employed in the commercial, health care, and retail sectors. The resident population is ageing and contains more people over the age of 50 compared to the Melbourne average. A greater mix of housing and facilities is needed to maintain, renew and sustain the area's population.

2.5 PLANNING CONTROLS

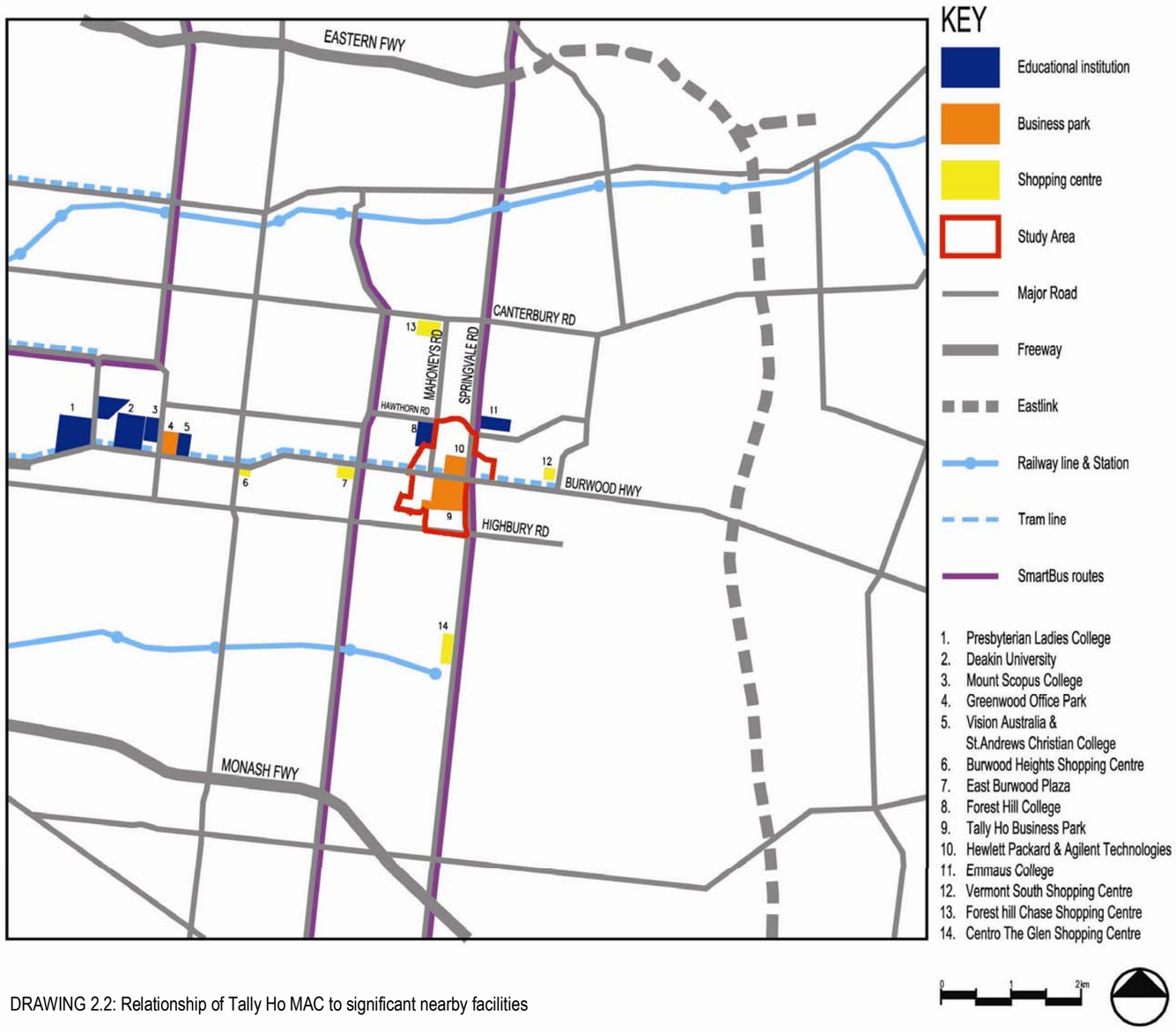
State and local planning controls have been taken into account in the preparation of this Urban Design Framework. Clause 19.03 of the State Planning Policy Framework sets out design principles in that must be taken into consideration in the design of urban spaces and buildings. These design principles include context; public realm; landmarks, views and vistas; pedestrian spaces; heritage; consolidation of sites and empty sites; light and shade; energy and resource efficiency; architectural quality; landscape architecture.

The formulation of this framework has been guided by the recently updated Municipal Strategic Statement, in particular clauses: 21.02 Key Issues, 21.03 A Vision for the City of Whitehorse, 21.04 Strategic Directions, 21.05 Environment, 21.06 Housing, 21.07 Economic Development, 21.08 Infrastructure, 22.03 Residential Development, 22.04 Tree Conservation, 22.05 Non-residential Uses in Residential Areas, 22.06 Activity Centres, 22.08 Tally Ho Business Precinct

Recent policy documents including the *Safer Design Guidelines, Guidelines for Higher Density Housing, Draft Public Transport Guidelines for Land Use Development* and the Masterplan for the East Burwood Reserve will further inform decision making in the area.



DRAWING 2.1: Activity Centres and Principal Public Transport Network Plan



KEY

- Educational institution
- Business park
- Shopping centre
- Study Area
- Major Road
- Freeway
- Eastlink
- Railway line & Station
- Tram line
- SmartBus routes

1. Presbyterian Ladies College
2. Deakin University
3. Mount Scopus College
4. Greenwood Office Park
5. Vision Australia & St.Andrews Christian College
6. Burwood Heights Shopping Centre
7. East Burwood Plaza
8. Forest Hill College
9. Tally Ho Business Park
10. Hewlett Packard & Agilent Technologies
11. Emmaus College
12. Vermont South Shopping Centre
13. Forest hill Chase Shopping Centre
14. Centro The Glen Shopping Centre

0 1 2km

DRAWING 2.2: Relationship of Tally Ho MAC to significant nearby facilities

Intersection of Springvale Road and Burwood Highway looking towards Tally Ho Business Park

3.0 PHYSICAL CONTEXT

3.1 HERITAGE

There are no significant heritage issues that relate to the Tally Ho MAC other than the social significance of Channel 0/10 as the new television network in the early identity of Nunawading.

3.2 IDENTITY

Since the development of the Business Park, the Tally Ho MAC has maintained a reputation for being a centre for high technology business and innovation. The integration of buildings with the landscape is an attribute that is valued amongst both workers and residents in the study area. The identity of Tally Ho is also aligned with its provision of health care, aged care and rehabilitation services. With the East Burwood Reserve being a regional attractor, the study area is also associated with major sporting events. At present there is little in the way of branding or signage which identifies the Tally Ho MAC as a unique and important centre in Melbourne's east.

3.3 LAND USE, ZONING & OWNERSHIP

Refer Drawing 3 on page12 & Drawing 4 on page 13

The Tally Ho Business Park, Hewlett Packard and Agilent Technologies site and the Burvale Hotel form a commercial and hospitality core at the intersection of Burwood Hwy and Springvale Rd. Notably, there is a lack of retail and business services at the core. The areas surrounding this core demonstrate a variety of uses including health care, aged care, residential, recreational and institutional (religious) uses.

There are a number of sites that contain significant areas of vacant land at different stages in the development process.

- The Global Television Studios site sits within a predominantly residential area with a number of educational institutions nearby and is to be partially redeveloped for residential purposes.
- The Burvale Hotel site is zoned residential but is well located as a node for convenience retail, hospitality, conference and entertainment facilities, being within walking distance of local residents, public transport users, commuters and occupiers of the commercial areas.
- The Hewlett Packard site presents at the corner of a major intersection and is likely to be redeveloped for commercial/office purposes.
- The Crossway Baptist Church owns a significant area of vacant land at the corner of Highbury Rd and Springvale Rd as well as an area of at-grade parking to the south of the Business Park. There are plans to redevelop both sites.

Several sites in the Activity Centre contain current uses that are not consistent with the Whitehorse Planning Scheme. The Burvale Hotel site is zoned residential but has historically always had a key role as an activity focus for the area. The Australian National Archives site is privately owned and is not subject to control by the Whitehorse Planning Scheme. The Optus Satellite Earth Station is surrounded by commercial, recreational and residential uses and is accessed via a long laneway that runs behind residential properties.

3.4 BUILT FORM AND DENSITY

Refer Drawing 5 on page 14

The overall density of built form in the study area is low. A central zone of commercial buildings (up to 6 storeys in height) set in a parkland environment is surrounded by a zone of mainly residential buildings (mostly between 1 and 2 storeys in height). The balance between built form and landscape is a quality that the area's population is keen to preserve. The visual prominence of the MYOB building makes it a suitable reference point for determining the scale of new built form. Given the varying attributes of the surrounding land uses, the topography of the area and the nature of abutting streets, a heterogeneous approach to determining built form and density would be appropriate.

3.5 INTERFACES

Refer Drawing 3 on page 12

With the exception of residential areas and the mixed-use zone on Burwood Hwy, developments in the study area tend to be inward-looking with built form failing to address the street. Similarly, the buildings along the west border of the Business Park turn their backs on the adjacent East Burwood Reserve. The interfaces between residential and non-residential areas are generally poorly resolved and are characterised by fencing with occasional landscape buffering.

3.6 COMMUNITY CONTEXT AND COMMUNITY FACILITIES

Refer Drawing 6 on page 15

The provision of, and continued reinvestment in the quality, extent and scope of affordable, social and special housing, community services, spaces for people to interrelate, adequate facilities to meet their daily needs, and improved public transport, parklands and community/recreation facilities are critical to the on-going viability of the area's diverse community base.

Convenience Retail and Services

At present there are insufficient places and facilities for the area's large workforce and the culturally and socio-economically diverse resident and working population to interact and form community links. Places to meet, learn, transact, participate, shop and relax are in short supply. There has been little attempt made to integrate the core commercial and business elements of the Tally Ho Business Park with the surrounding community or to recognise that with this large daily population frequenting the area there has emerged a necessity to expand the range of services, infrastructure and facilities to meet the needs of this workforce. For example there is limited high quality conference or short-term accommodation in the vicinity of the Tally Ho area. Moreover there is a lack of services for local business most obviously convenience retail and postal facilities. The large population of residents living in the area have a similar problem with the closest convenience retail or supermarket being approximately a kilometre to the east or west and beyond walking distance (the Vermont South Shopping Centre is 1.2 km east of the intersection of Springvale Rd and Burwood Hwy, whilst Kmart Plaza is 1.8 km west of the intersection).

Housing

The study area is too small to do any statistical analysis or projections on population for the area. A more appropriate response is to monitor trends in housing type demand and identify opportunities unique to the area that facilitate particular development solutions.

The recent development of the retirement village on Highbury Road and higher density housing adjacent to the Crown Coaches site are examples of housing forms that benefit from their proximity to both public transport corridors, open space facilities and a range of recreation and community services. The majority of the existing housing stock in the area is in good condition and is not identified in Council's Housing Study as an area of significant change.

Locations that are capable of accommodating additional housing are:-

- The Global Television site wherein part of the site has received planning approval for a subdivision of medium density and smaller lot housing (47 lots in total).
- The Burvale Hotel Site wherein an opportunity exists for short term hotel or serviced apartment accommodation aligned with the business needs of the region.
- The mixed use precinct to the west along Burwood Highway (Crown Coaches) where subject to environmental clearance shop-top or medium density housing is a possible use within the zone.

Anecdotal evidence suggests that some occupants of new higher density housing in the location are working at the nearby Tally Ho Business Park, pointing to the opportunities that might exist for improved integration of facilities.

Education

The area is well serviced by a range of primary, secondary and tertiary facilities that are within convenient walking distance of tram and bus services. However the bike and pedestrian network fails to link these facilities in a convenient manner. Recent developments in educational policy have identified the potential for schools to operate as something of a hub for after-hours community activity. With the exception of Deakin University's Burwood campus, this opportunity is yet to be optimally developed in the area. Whilst Deakin University is located outside the Activity Centre, it is well placed on Burwood Highway with a direct tram link to the heart of the Tally Ho MAC.

Community Oriented Organisations

A number of community oriented organisations have, in recent years, experienced a significant increase in demand for their services and will require guidelines for their subsequent expansion. The Peter James Centre has doubled in size in the past 15 years and will need to accommodate increased demand for services as the community continues to age. The demand for additional meeting and chapel seating at Crossway Baptist Church and additional carparking requires the development of a masterplan for the site.

Health-care Facilities

The Tally Ho MAC includes the Peter James Centre, a specialist (rehabilitation) centre that has a regional role. A new medical centre is currently under construction near the intersection of Springvale and Hawthorn Roads. The role that the area plays in the provision of health-care services needs to be considered as the regional resident population continues to age.

3.7 OPEN SPACE, CONNECTIVITY AND LINKAGES

Refer Drawing 7 on page 16 & Drawing 8 on page 17

Public Open Space

The East Burwood Reserve provides a variety of indoor and outdoor regional sporting facilities for cycling, athletics, tennis, basketball, netball, football and cricket. These facilities are co-located with passive park and playground areas. There is increasing pressure on East Burwood Reserve to accommodate a range of community facilities, parking and infrastructure with the resultant loss of parkland areas. In many instances, the current occupants of buildings within the reserve are under increased pressure to expand in order to meet changing and/or increasing demands. As most of these buildings are stand alone, single-level, single-use complexes, such development places obvious, consequent pressures on remaining public open space and results in the duplication of expensive services and facilities.

Although the Tally Ho Business Park features extensive landscaped areas they are not intended for public use. Utilisation of parkland environment in the Business Park is compromised by excessive priority to vehicle access and parking, and inadequate pedestrian and bicycle connectivity across the site. The access to public open space and recreation areas is constrained by a number of physical barriers including unsignalised crossings, rear fences to residential properties and to the adjacent office and carpark areas. There is an absence of pedestrian and cycle connectivity to and between key activity nodes and surrounding areas. A recreation reserve is also located between the Global Television Studios site to the north and a residential area to the south however its interface with the GTV site is poorly resolved.

Cyclists and Pedestrians

Within a number of sites (e.g. East Burwood Reserve) there are some limited provisions for pedestrians and cyclists. Bike paths exist within the Reserve, creating a link between Burwood Hwy and the Scotchman's Creek Trail, and an on-road bike lane runs east along Hawthorn Rd. However, in general, the pedestrian and cyclist linkages and amenities in the study area are insufficient and poorly defined. There is a need to increase the quality and extent of pavement areas for pedestrians and cyclists along key links, nodes and streets including retail streets and public transport and education campus hubs. Walkability in the study area is poor, notably between public transport nodes and key community, commercial, educational, recreational and hospitality destinations. The quality and continuity of footpaths and streetscapes is poor with a lack of trees, public lighting, resting points and active interfaces. Pedestrian amenity could also be improved within developments and to and from major street frontages.

Public Transport

The study area is reasonably well serviced by public transport with the 75 tram and 732 bus routes running along Burwood Hwy and the 888 and 889 SmartBus routes running along Springvale Rd. However the visual presentation of the tram network is inadequate, the amenities at bus stops need improvement and there is poor integration of pedestrian access to schools and key activity nodes from tram and bus stops. Disability access to and from public transport and major destinations within the activity centre is also inadequate.

3.8 STREETSCAPES

Refer Drawing 7 on page 16

The main streetscapes in the study area are poorly developed. Footpaths are of inconsistent quality and discontinuous in some areas (e.g. along Springvale Rd in front of the Burvale Hotel). The footpaths along Springvale Rd and Burwood Hwy are fully exposed to traffic, have no provisions for shelter or shade and lack quality urban design and landscaping. The priority given to motor vehicle traffic and at grade car parking has led to the removal of landscaping alongside Springvale Road and Burwood Hwy and within parkland areas such as the Reserve and the Business Park. Many streets within the study area, with the exception of the mixed-use zone on Burwood Hwy, lack activity and engagement at ground level and with interfacing streets leading to poor perceptions of safety.

3.9 TRAFFIC AND PARKING

Refer Drawing 9 on page 18

Traffic

Motor vehicles moving through the study area have at present an inappropriate prioritisation at all levels of physical planning within the area. Whilst it may reasonably be anticipated that the movement of cars is a major component of the functional role of Springvale Road and Burwood Highway, in recent years this has seen (via further widening) the removal of landscaping in both major roads, the degrading of the visual amenity of the area and the creation of hostile environments for pedestrians that are at odds with the major investment that has been made in public transport. The treatment of the tram stops is stark, unappealing and poorly sign posted relative to the provisions made for motor vehicles.

Within the East Burwood Reserve where large numbers of children and spectators might be anticipated, pedestrian and bicycle movement has not been prioritised. It is hence unsurprising that the area has continued to attract visitation predominantly by car. Whilst this option must continue to be convenient, it is important for the amenity of users to minimise unnecessary short vehicle trips between elements of the study area and for those who might reasonably access the area by public transport, foot or bicycle if a safe, direct and high quality network and set of linkages existed. Motor vehicle congestion is a major threat to both liveability and economic development of the Tally Ho MAC. The Peter James Centre for example will be incorporating boom gates to stop motorists from using the parkland drive through their site as a shortcut to avoid the Burwood Highway/ Mahoneys Road intersection. Individual developments are providing expansive areas of parking that remains largely unutilised on weekends in the case of commercial facilities.

Running in a north-south direction, Mahoneys Rd provides a link between the Reserve and Burwood Hwy to the south and Forest Hill Secondary College to the north. The intersection of Mahoneys Rd with Burwood Hwy is, however, unsignalised. Significant numbers of vehicles, bringing worshipers to the Crossway Baptist Church, enter Vision Drive via an unsignalised intersection with Springvale Rd. Local user groups have expressed concerns regarding the safety of motor vehicle movements at these unsignalised intersections.

Parking

Provision of car parking is generally provided on a property by property basis resulting in often inefficient parking provision with substantial loss of scope for areas for landscape and development. Assessment by Traffix Group has shown that a number of sites in the Tally Ho Business Park are operating at or above their long-term parking capacity and are likely to be generating and contributing to the on-street parking demand or in some instances the parking demand within the East Burwood Reserve car park.

The need for parking during the week varies according to requirements of different user groups. During the working week the vast majority of parking demand comes from workers in the Business Park. During the weekend there is a demand for parking at the Reserve and Crossway Baptist Church. At most times when there is peak demand on parking within the reserve (i.e. weeknights and weekends), parking utilisation in the adjacent business park is low. During the working week overflow parking from the business park is, at times, in conflict with the Reserve visitor parking demand.

Within developments, at-grade parking has created expansive physical barriers between the entry to buildings and surrounding streets and park areas leaving pedestrian areas lacking active interfaces and a sense of safety and security. The organisation of some car parking areas diminishes the quality of walking, commercial and residential environments and diminishes access to key open space areas. The provision of at grade carparking will need to be reconsidered if there is to be scope for adaptation and change to existing building stock and generous areas of landscaping consistent with the preferred character of the area. Future plans must ensure that car parking capacity is developed to accommodate increased growth in demand at locations that minimize congestion and maximise the potential for efficient utilisation. Motor vehicle congestion is seen as a key issue in the area and can be only addressed through increasing the attractiveness of the alternatives to short vehicle trips. Thus investment in public transport, notably improvements in tram and smart bus services, is necessary along with improvements to bicycle and walking networks to facilitate modal shifts, reduce short car trips and enhance access and transport choices.

Refer to Appendices 1 and 2 for the traffic analysis of the study area.

4.0 COMMUNITY & STAKEHOLDER CONSULTATION

4.1 CONSULTATION PROGRAM

The views of the Tally Ho community, both residential and business, have been integral to the development of the Framework. The community has provided important information related to its issues, needs and aspirations for the area in the future.

Consultation occurred throughout the Framework process to engage the community, through a range of means as outlined below:

- Regular 'Community Bulletins' were prepared by the City of Whitehorse that provided information relating to opportunities to provide feedback or attend consultation sessions. The bulletins also provided an update on the progress of the Framework and key findings or directions as they were developed. Three of the bulletins were distributed to all residents and businesses in the study area and beyond at key milestones in the Framework program. Other bulletins were distributed to the project mailing list, as well as being available at local venues, the Council website and Council Service Centres.

- A 'Community Workshop' began the consultation program and was held on November 10th, 2004, with 40 people in attendance. Attendees included residents, employees from the Business Park and local community group representatives. The community were asked what they value about the area, in relation to the themes of built form, density, heights, active and passive open space, vegetation, transport and traffic, walking and cycling paths and land uses. Refer to Appendix 3 for the Tally Ho UDF Report on Community Consultation Session and Feedback, IUM, December 2004, which provides a comprehensive summary of the feedback received at the workshop.

- A 'Business Drop-in Session' was held within the Tally Ho Business Park on July 10th, 2006 to target the business community. The session provided local businesses with the opportunity to view the plans and initial ideas and provide one-on-one feedback to officers and the consultants.

- Exhibition of the Draft Framework occurred between September 25th and October 27th, 2006. A bulletin and copies of the Draft Framework were available for viewing at local venues, Council Service Centres and the Council website and the community were encouraged to provide feedback on the draft plans. This period also included a 'Saturday Display Day', held at the East Burwood Hall at East Burwood Reserve. Approximately 60 residents visited the hall to view the Draft Framework and discuss the proposed plans and directions with Council officers and the consultants. At the same time, Crossway Baptist Church held a display of their Draft Master plan. Refer to Appendix 4 for the Community Feedback to the Exhibition Draft of the Urban Design Framework, October 2006, which provides a comprehensive summary of the written feedback received during the exhibition period.

In addition to this consultation with the wider community, a number of state and local agencies, key interest groups and land owners were consulted in the preparation of the Framework.

4.2 CONSULTATION KEY FINDINGS

The following key findings or community and stakeholder issues have been derived from the various consultation processes outlined in 4.1.

4.2.1 Community Context and Community Facilities

- There is a lack of services for local residents and businesses, in particular convenience retail and postal facilities.
- There is a need for a childcare facility.
- Sporting facilities provided at East Burwood Reserve are highly valued.

4.2.2 Traffic and Parking

- Strong community concern surrounds traffic and pedestrian safety at Burwood Highway / Mahoneys Road and Springvale Road / Vision Drive intersections with strong support for measures to upgrade those intersections.
- At-grade parking is excessive and inefficient at the expense of landscaping.
- Insufficient parking within the Business Park was widely acknowledged with resultant overflow parking in the East Burwood Reserve a concern.
- Increases in traffic volumes as a result of new development, particularly on the Burvale Hotel and Hewlett Packard site are a common concern.

4.2.3 Open Space, Connectivity & Linkages

- Extent and quality of pedestrian and bicycle linkages is poor, particularly to the Reserve.
- Improvements to the pedestrian and bicycle paths, particularly along the Melbourne Water Pipe Track and between the East Burwood Reserve and surrounding areas are widely supported.
- Different modes of public transport are not well integrated.
- Identity and amenity of public transport stops is poor.
- Pedestrian movement in the area is hindered by the difficulty in crossing Burwood Highway and Springvale Road.
- Parkland at the Reserve and other existing public open space is highly valued but rest and picnic areas are sought after.

4.2.4 Streetscapes & Landscaping

- There is a lack of shade/shelter along streets.
- Footpaths along main roads have poor pedestrian amenity, are exposed to traffic and are often discontinuous.
- Poor levels of perceived safety exist on streets and pathways.
- Landscape/vegetation networks are poorly connected, particularly along the Springvale Rd median strip and service road.

4.2.5 Built Form and Density

- Preservation of vistas and a perceived balance between built form and landscape is highly valued by residents.
- There is an appreciation of well-designed built form.
- New building heights not exceeding 20 metres above ground level (equivalent to the MYOB building) are generally supported provided they are strongly regulated.

4.2.6 Land Use

- The Burvale Hotel site is historically a node for local activity that provides valued hospitality and entertainment services.
- The owner and tenant of the Burvale are interested in providing local retail, business service, short term accommodation, conferencing and hospitality services.
- The local population dislike the current built from and layout of the Burvale, however views are mixed on the proposal for the site to accommodate substantial re-development, with particular concern expressed in relation to a new supermarket.
- Local users of the Business Park point to issues of inadequate car parking, lack of business services, lack of opportunities for growth and poor interconnectivity.
- The concept of encouraging privately-operated multi-level carparking to alleviate parking shortages and reduce at-grade parking has mixed support, with primary apprehension relating to Fringe Benefit Tax issues.
- To meet increasing demand, Crossway Baptist Church has plans to expand its existing facility to include a 2500 seat auditorium and other allied facilities and the local community generally supports these plans.
- Hewlett Packard plans to establish its Melbourne headquarters on its vacant land with an emphasis on environmentally sustainable design.

Refer to Appendices 3 and 4 for a comprehensive set of consolidated feedback from the Community Workshop and Exhibition of the Draft Framework.

5.0 ACTIVITY CENTRE OBJECTIVES AND STRATEGIES

VISION STATEMENT:

"IDENTITY + KNOWLEDGE + SUSTAINABILITY + VITALITY + COMMUNITY = TALLY HO"

Building on the pioneering vision of "Tally Ho" as a centre for late 20th century commerce with supplementary value adding of:

- *Environmental sustainability*
- *Economic development based on new generation commerce and knowledge*
- *Community wellbeing and inclusiveness*
- *An active, liveable centre*
- *Integration of the knowledge, commercial and resident community for mutual benefit*

5.1 IDENTITY + KNOWLEDGE

5.1.1 Economic Sustainability

Key Objectives:

- To strengthen the centre's role as a high tech business hub of state significance.
- To strengthen relationships between high tech commerce and high quality education.
- To develop Tally Ho as an activity centre that meets the diverse needs of both business users and the broader community.

Strategies for Implementation

Strategic

- Develop a unique brand for Tally Ho MAC.
- Seek to establish Tally Ho and Deakin University as the office and educational hubs for the Burwood Hwy corridor.
- Seek to create an education and knowledge corridor along Burwood Hwy that links educational institutions e.g. Deakin University, Mount Scopus College, Forest Hill SC and Emmaus College, and leading-edge businesses located in the Greenwood and Tally Ho Business Parks.
- Consider establishing a committee to provide leadership in a knowledge and business program between Deakin University and key educational and commercial tenants in the Tally Ho MAC as part of the *Whitehorse Economic Development Strategy 2007-2011*.
- Undertake rezoning of sites to facilitate a desired land use mix. For example the Burvale Hotel site is currently zoned residential but any future development on the site is likely to incorporate a mixture of uses.
- Encourage the introduction of a greater mix of complementary uses that fill current areas of high need, notably retail, business services, short term accommodation and high quality conferencing facilities.
- Establish a Development Contributions Plan, where applicable, to facilitate funding of projects that support improved access and amenity of facilities.

Physical

- Encourage improvements to the capacity and flexibility of building stock in the study area.
- Encourage an increase in the quality of conferencing and short term accommodation to define the Tally Ho MAC as the centre for such facilities along the Burwood Hwy corridor. A possible location for such facilities is the Burvale Hotel site.
- Establish a landscape strategy that unifies the Burwood Hwy corridor and defines distinctive key nodes along its length.
- Ensure adequate provision of housing through optimising opportunities for housing diversity in the study area.
- Prioritise housing types that are traditionally difficult to locate in residential areas e.g. affordable housing, aged-care housing, specialist housing and apartments, serviced apartments and hotel facilities.
- Improve the visual prominence and quality of patron amenities at tram/bus Super stops and improve the identity for the business and education knowledge corridor linking Deakin University and Tally Ho. Drawing 8 shows an artist's impression of what an upgraded Tram Superstop with "Tally Ho" branding might look like.

5.1.2 Built Form and Density

Refer Drawing 5 on page 14

Key Objectives:

- To create a built environment that is attractive, safe and establishes a strong sense of place.
- To accomplish required growth within the Tally Ho MAC within a consistent urban built form solution.
- To develop new built form characterised by architectural design excellence.
- To enable additional capacity to be achieved without unreasonable impacts on surrounding residential areas.
- To maximise the efficient use of buildings.

Strategies for Implementation

Strategic

- Provide appropriate planning and design guidelines for
  - the development of key sites including principles that address building envelopes, height, articulation and interfaces.
  - streetscape interfaces between key sites
  - landscaping in the public and private realm.
- Consider the Tally Ho UDF objectives when reviewing the East Burwood Reserve Masterplan to ensure building footprints are minimised and where possible diminished through relocation, multi-level development and shared utilisation of facilities.
- Identify at-grade parking areas suitable to provide existing developments with additional capacity space and additional landscaping.

Physical

- Facilitate higher density mixed-use outcomes for targeted uses on key sites.
- Provide for land uses that will offer passive surveillance and consequently increased security.
- Ensure overlooking and overshadowing by new built form is avoided.
- Encourage use of robust long-lasting materials and finishes in the construction of new buildings.
- Ensure that building development responds to the characteristics of surrounding streets and places.
- Ensure additional built form capacity is achieved in conjunction with development of high quality streetscape networks and amenity.
- Ensure the form and scale of new development is determined by factors such as local topography, the framing/protection of views and the form and scale of abutting developments/uses.
- The maximum height of built form at the intersection of Springvale Rd and Burwood Hwy should be determined relative to the height of the MYOB building in the Business Park. Thus a maximum building height of 20 metres above ground level (measured from 113 metres AHD) is possible at this intersection.
- Support the framing and enlivening of the edges of the commercial core with new built form and activity at ground level.

5.2 SUSTAINABILITY

5.2.1 Environmental Sustainability

Key Objectives:

- To create a sustainable urban environment.

Strategies for Implementation

Strategic

- Ensure that new building development incorporates benchmark best practice environmentally sustainable measures.
- Develop principles for car parking provision and green travel plans.
- Prioritise the Tally Ho MAC when implementing the *City of Whitehorse Streetscape Policy and Strategy, January 2002*
- Establish a Development Contributions Plan, where applicable, to support the upgrade and maintenance of enhanced streetscapes and public transport facilities.

Physical

- Expand and upgrade the open space network and improve links to adjoining areas with generous space for canopy trees and retarding areas.
- Seek to expand the planting strategy along the Burwood Hwy and Springvale Rd corridors and retain existing canopy trees.

- Implement principles of water-sensitive design for all roads and open spaces.
- Plant native vegetation with low water demand.
- Consider consolidation of buildings and multi-level development to avoid loss of valued parklands.

5.2.2 Transport and Car Parking

Refer Drawing 8 on page 17 & Drawing 9 on page 18 for site specific actions.

Key Objectives:

- To create high quality amenity for all users of the Tally Ho MAC (pedestrians, cyclists and motorists).
- To diminish Tally Ho's traditional reliance on private motor vehicle transport for accessing employment and services.
- To meet current and future car parking needs without a deleterious effect on landscape and amenity.
- To reduce existing at-grade parking areas.
- To improve safety of vehicular and pedestrian movements at intersections and across major roads, particularly Burwood Hwy and Springvale Road.
- To enable the community to access all transport modes.

Strategies for Implementation

Strategic

- Develop an Integrated Transport Plan incorporating sustainable transport and traffic studies informed by detailed trip pattern analyses.
- Ensure that private developers assess the impact of future projects on traffic volume, access and movement patterns and provide traffic impact assessments accordingly.
- Support partnerships in surrounding land uses to ensure maximum use is achieved for car parking and infrastructure.
- Consider implementing the recommendations of TraffixGroup's *Traffic Engineering Assessment* and *Supplementary Report,* September 2006.

Physical

- Seek to improve the quality and extent of public transport facilities.
- Encourage an increase in local convenience retail and residential accommodation aligned with the needs of the resident and working population of the area to diminish the need for short car trips.
- Encourage the development of commercial multi deck carparking facilities at key activity nodes to reduce at-grade parking and cater for demand 7 days a week.
- Where multi-deck carparking is provided consider supporting additional facilities in the development such as:
  - landscaped open space
  - bike facilities
  - mixed use [emphasizing civic and community uses] development
- Seek to improve the safety of vehicular and pedestrian movements at key intersections and major roads (Burwood Highway / Mahoneys Road and Springvale Road / Vision Drive) by appropriate traffic control measures such as signalisation .
- Public Transport
  - Explore street modification measures that facilitate improved public transport access for pedestrians.
  - Reinforce public transport linkages between the study area and surrounding land uses and infrastructure, including the network of school and university campuses, recreation facilities and higher density housing neighbourhoods and institutions.

5.3 VITALITY

5.3.1 Open Space, Connectivity & Linkages

Refer Drawing 7 on page 16 & Drawing 8 on page 17 for site specific actions.

Key Objectives:

- To enhance the quality and extent of landscaping in existing open space areas.
- To enhance the quality, extent and interconnectivity of pedestrian and cycle linkages through the Tally Ho MAC and connecting to surrounding networks.
- To foster a culture of walking, cycling and public transport utilisation.

Strategies for Implementation

Strategic

- Develop a Way-finding Plan/Signage Strategy to co-ordinate the integration of new pedestrian and bicycle networks.
- Conduct a Pedestrian Access Study to identify and recommend specific solutions to improve mobility, safety and access through the MAC.
- Consider opportunities if they become available, to purchase or redevelop sites to improve connectivity and linkages.

Physical

- Pedestrian and Bicycle Linkages
  - Upgrade, expand and integrate network of pedestrian and cycle pathways through the Tally Ho MAC and connecting to surrounding networks.
  - Develop initiatives that improve the safety of the pedestrian and bicycle network through
    - expansion of off-road network
    - solar powered lighting along pedestrian/bicycle corridors
    - activation of interfaces to pedestrian and bicycle corridors
    - increased visual surveillance of networks from ground and upper floors of surrounding buildings
  - Improve attractiveness, extent and capacity of pedestrian areas. Provide resting/seating points along pedestrian links.
  - Encourage perimeter pathways to be setback as far possible from the roadway to provide pedestrian protection, at a minimum width of 2 metres.
  - Encourage more direct pathway links/routes between and throughout the internal boundaries.
  - Consider a broader use of non-standard materials, and consider colours in pavement to strengthen landscape concepts.
  - Consider sustainable uses of materials for water permeability and direction of runoff to garden bed areas.
  - Reconfigure key pathways through the Tally Ho MAC to facilitate disability access.
  - Expand the existing bicycle network to link key activity nodes within the Tally Ho MAC and to the greater regional bike network.
  - Liaise with Melbourne Water to upgrade the pipeline bicycle track to reflect its significance in the regional bike network.
  - Ensure the provision of secure short term and long term bicycle storage at all major destination hubs i.e. the key sites for development.
  - Ensure that improvements to pedestrian and bicycle networks include signage and wayfinding measures that provide the user with a sense of their location and direction of travel within the area.

5.3.2 Streetscapes and Landscapes

Refer Drawing 7 on page 16 for site specific actions.

Key Objectives:

- To create vibrant, active and safe streets.
- To provide high quality and visually continuous streetscapes.
- To achieve high quality resolution of interfaces between areas of different land uses.

Strategies for Implementation

Strategic

- Provide appropriate planning and design guidelines for the development of key sites that consider the relationship of buildings with surrounding streetscapes.
- Develop Landscape Guidelines for both the public and private realm.
- Develop a Planting Strategy for main roads, in light of VicRoad's Technical Bulletin No.36, *A Guide to Tree Planting within Road Reserves*, September 1987.
- Establish a Development Contributions Plan, where applicable, to support the upgrade and maintenance of enhanced streetscapes.

Physical

- Landscaping
  - Ensure provision of adequate landscape/vegetation buffers between residential and non-residential areas.

- Encourage new developments to adopt a stylised landscape design theme that is consistent throughout the Activity Centre.
- Seek to expand the planting strategy and pavement improvement strategy along Burwood Highway, Springvale Road and the Reserve/Business Park interface to promote them as tree-lined promenades.

- Ensure that new buildings demonstrate regular entrances and appropriate ground floor activation at street interfaces.
- Encourage the creation of high quality, generously scaled pedestrian environments characterised by more planting along streets and entry squares to key buildings and activity nodes.
- Encourage interesting and activated building interfaces with a particular emphasis on key intersections and public transport nodes to improve pedestrian safety through passive surveillance.
- Provide regular areas of shelter through the Activity Centre.
- Develop a visually and physically integrated network of high quality pavements through the Activity Centre that are of simple and robust design and can be easily cleaned and maintained.
- Ensure the future treatments of key streets provide a coherent and continuous visual streetscape identity and quality.
- Improve resolution of interfaces through careful management of the built form, landscaping and building treatments.
- Review the lighting concepts for the Activity Centre taking into account security, sustainability and design integrity (hours of operation, lighting types and styles all have potential for adjustment).

5.3.3 Land Use & Zoning

Refer Drawing 3 on page 12 & Drawing 4 on page 13

Key Objectives:

- To provide high quality and increased mix of activity in new and existing developments.
- To facilitate the development of land uses consistent with the vision and objectives of the Tally Ho UDF.

Strategies for Implementation

Strategic

- Identify amendments to the Whitehorse Planning Scheme that will facilitate implementation of the vision and objectives of the Tally Ho UDF. Amendments to be considered include:
  - Rezoning strategic sites as required. E.g. Burvale Hotel and National Archives
  - Reviewing the schedule to the Mixed Use Zone, with particular reference to the Crown Coaches site
  - The introduction of Design and Development Overlays for key sites to give effect to design guidelines as appropriate
  - The introduction of a Development Contributions Plan Overlay, to give effect to a Development Contributions Plan
  - Updating the Municipal Strategic Statement and Clause 22.08 – Tally Ho Business District
- Consider the objectives and strategies of the Tally Ho UDF and in particular the need for Tally Ho MAC to accommodate neighbourhood retail facilities as part of the *Whitehorse Economic Development Strategy 2007-2011*.

Physical

- Encourage the redevelopment of sites that are underutilised or have poor building quality to better align with the emerging need for office, business services, convenience retail and short term accommodation in key areas. Sites for such redevelopment include the Burvale Hotel, Hewlett Packard and Crown Coaches key sites.
- Identify key sites and precincts near public transport, car parking and activity nodes where increased employment and service provision can be facilitated.

5.4 COMMUNITY

Refer Drawing 6 on page 15

Key Objectives:

- To provide places and facilities for the area's resident and working population to interact and form community links.
- To ensure the long term viability of vital existing community facilities and services including their need to continue to grow and change to meet emerging community needs.
- To provide access to community facilities for all members of the community

Strategies for Implementation

Strategic

- Ensure investment in community services is optimised through efficient use of buildings including co-location and joint use of facilities where appropriate.
- Facilitate partnerships between government agencies to consolidate and regenerate sites for improved community facilities. For example partnerships between local and state government to achieve improvements to the East Burwood Reserve, the Peter James Centre or transport facilities.
- Encourage the provision of accommodation, particularly affordable housing and short term accommodation suited to the business community on the Global Television, Burvale Hotel and Crown Coaches sites.
- Facilitate the on-going role of the Peter James Centre as a regional health service.

Physical

- Ensure that community and regional facilities are maintained at least at their current level and are able to continue to attract regional events.
- Support development of local retail services and facilities, for example a supermarket, postal services and childcare, to meet the needs of the local walking and public transport-using population along with the local worker population.
- Seek to improve access to parkland areas from adjacent areas.
- Facilitate development of new parking, meeting facility and short term accommodation infrastructure that is located for maximum use 7 days a week.
- Contribute to improved standards of community health and well-being by encouraging walking and cycling as part of the daily routine of residents, employees and visitors.

6. KEY SITE POLICY DIRECTIONS

Refer Drawings 10 to 16 on pages 19 to 25

Within the study area, locations for change on 6 key sites have been identified based on assessments of the:-

1. Quality of existing building stock,
2. The historic growth and projected demand on services and facilities within the study area,
3. Strategic value of transitions in land use and development intensity,
4. Current and future needs and strategic review of preferred sites for change,
5. Consultation with stakeholders and
6. Broader goals for environmental, social and economic sustainability, vitality and safety.

The key sites include:

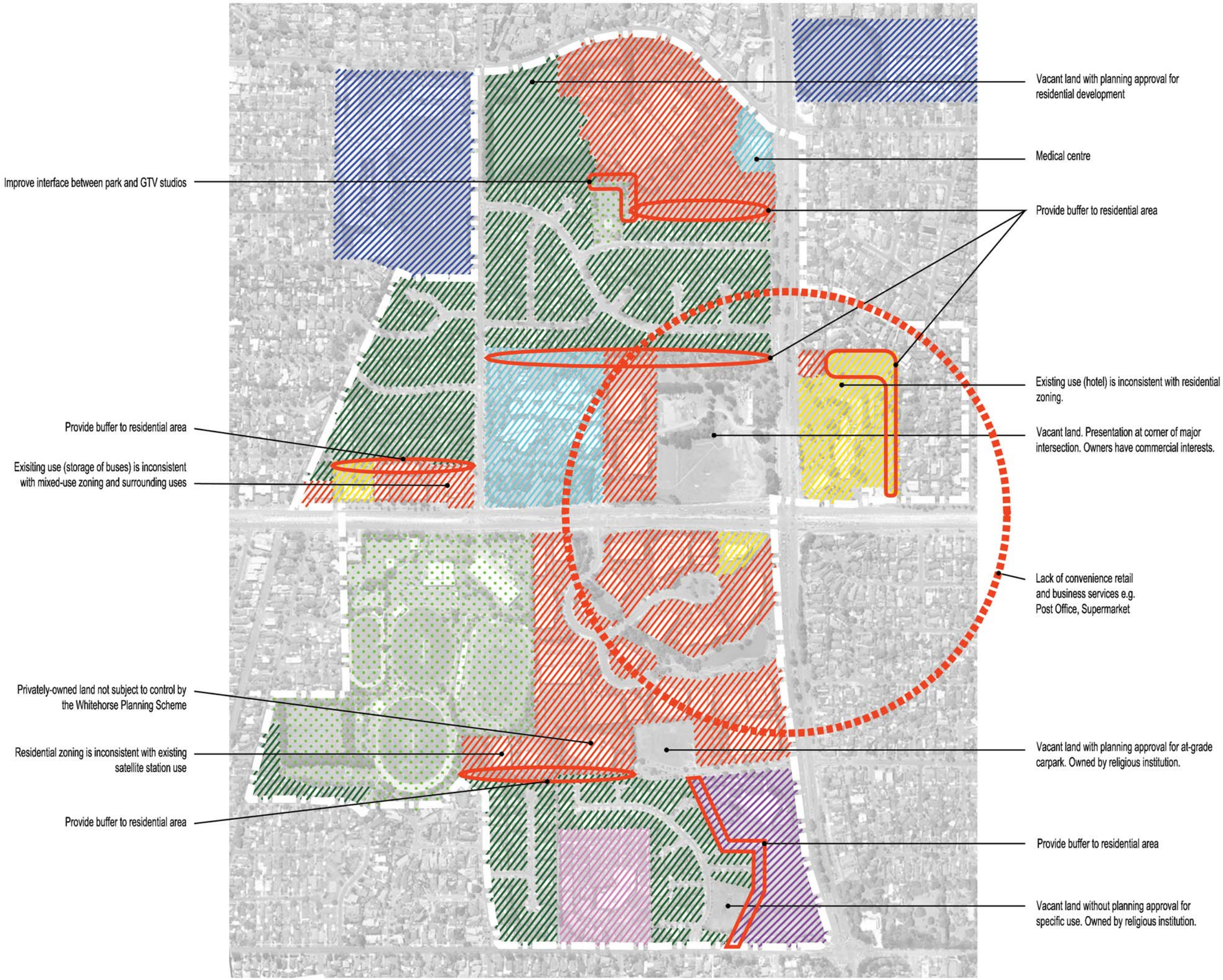
1. Global Television Studios
2. The Burvale Hotel
3. The Tally Ho Business Park
4. Crossway Baptist Church
5. The East Burwood Reserve
6. Hewlett Packard

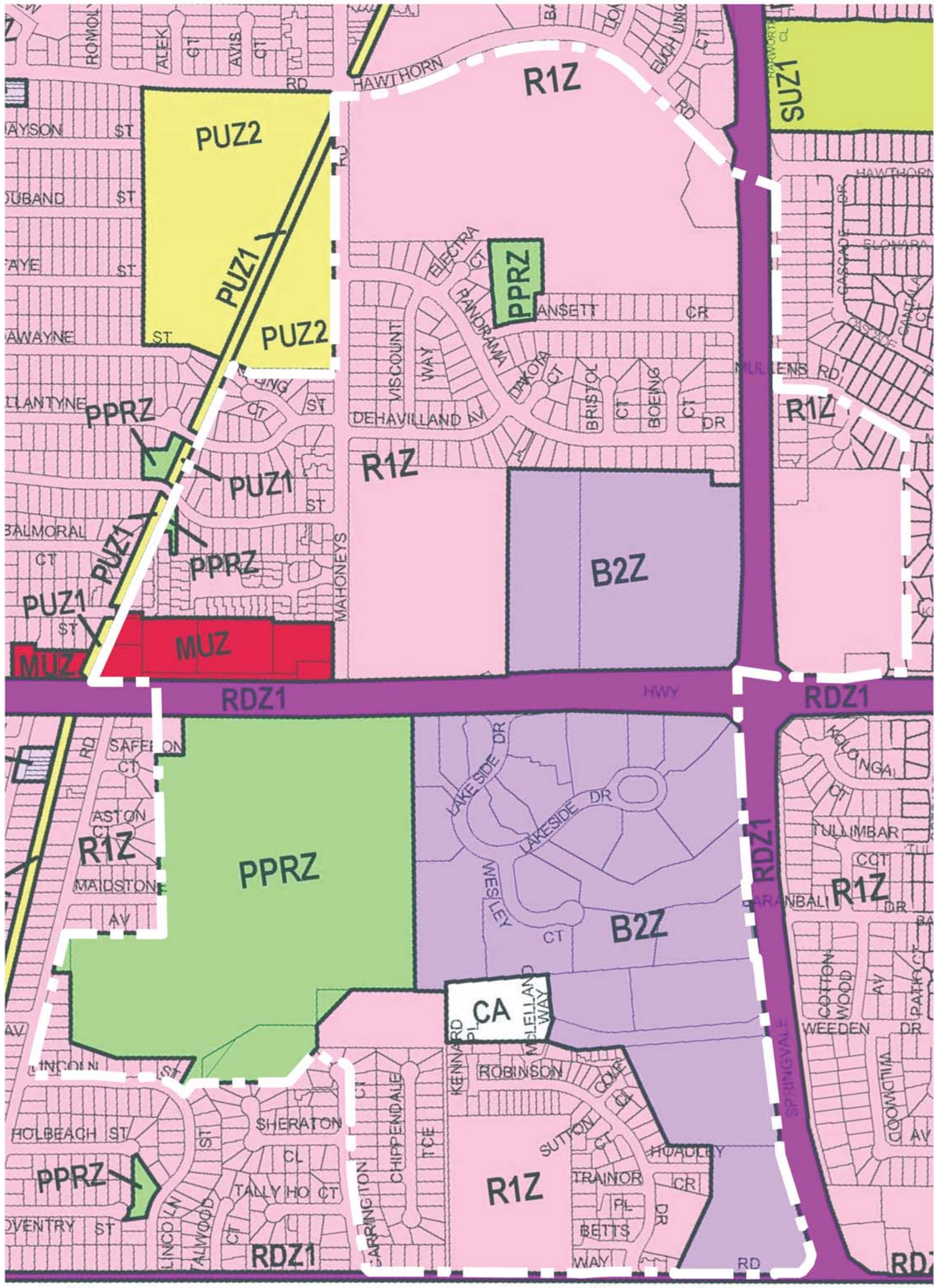
NOTE: The objectives and strategies in sections 5.0 and 6.0 provide direction for the development and improvement of Tally Ho MAC for the City of Whitehorse, State Government and its agencies, landowners and developers as appropriate.

7. INVESTMENT & IMPLEMENTATION

The following projects are specific actions that require further investigation, research and funding in order to satisfy the objectives of the Tally Ho UDF. Funding is subject to annual budget approval processes. In addition, there are a range of other strategies in sections 5.0 and 6.0 to be undertaken by the City of Whitehorse, State Government and its agencies, landowners and developers as appropriate.

	PROJECT	PROJECT LEAD	STAKEHOLDERS	PROVISIONAL COST ESTIMATES	INDICATIVE TIMESCALE (to be commenced within)
	Economic Sustainability				
1	Develop a branding strategy for the Tally Ho MAC	CoW – Business & Economic Development	VicRoads, DOI, Landowners	$60, 000	2009-2012
2	Prepare Development Contributions Plans as appropriate	CoW - Business & Economic Development, Strategic Planning	DSE	$25, 000	2009-2012
	Built Form & Density				
3	Provide appropriate planning and design guidelines for new development in key sites, that address building envelopes, site coverage, height, built form, interfaces and ESD	CoW - Strategic Planning		$30, 000	2008-2010
	Transport & Car Parking				
4	Develop an Integrated Transport Plan (includes a sustainable transport plan and transport impact assessment plan)	CoW – Engineering & Environmental Services, Strategic Planning	DOI, VicRoads, Landowners and tenants, Melbourne Water, Bicycle Victoria	$35, 000	2008-2010
5	Upgrade public transport facilities and improve amenity in accordance with the objectives of the UDF	DOI	CoW, VicRoads	$45, 000 (Bus facilities) $500, 000 (per new Tram Superstop)	Ongoing
	Open Space, Connectivity & Linkages				
6	Conduct a Pedestrian Access Study to recommend specific solutions to improve mobility, safety and access through the Tally Ho MAC	CoW – Engineering & Environmental Services, Strategic Planning	DOI, VicRoads, Landowners and tenants	$30, 000	2008-2010
7	Develop a Way-finding/Signage Strategy	CoW – Urban Design	DOI, VicRoads, Landowners, tenants and local schools	$51, 000	2009-2012
8	Review the East Burwood Masterplan taking into account the recommendations of the Tally Ho UDF	CoW – Parks, Planning & Recreation	User groups	$60, 000	2012 or beyond
	Streetscapes & Landscapes				
9	Develop Landscape Guidelines for both the public and private realm, including a Planting Strategy for major roads	CoW - Urban Design	VicRoads, Landowners and tenants	$60, 000	2009-2012
	Land Use & Zoning				
10	Review and amend the Local Planning Policy Framework of the Whitehorse Planning Scheme	CoW - Strategic Planning	DSE	$20, 000	2008-2010
11	Review and amend the zoning and planning controls of applicable sites within the Tally Ho MAC	CoW -Strategic Planning	DSE	$20, 000	2008-2010
	Key Private Sector Projects				
12	Facilitate the mixed-use development of the Burvale Hotel site and 397 Burwood Hwy, including entertainment, hospitality, conference and neighbourhood retail	CoW – Development, Strategy & Business Services	Landowners	N/a	Dependent on timing of development
13	Facilitate the development of a master plan for the Hewlett Packard site with a focus on high technology business/employment	CoW - Development, Strategy & Business Services	Landowner	N/a	Dependent on timing of development
14	Facilitate Tally Ho Business Park office extensions and modifications that are in keeping with the objectives of the UDF	CoW - Development, Strategy & Business Services	Landowners and tenants	N/a	Dependent on timing of development
15	Facilitate the mixed-use development of the Crown Coaches site including office, retail and/or accommodation	CoW - Development, Strategy & Business Services	Landowner	N/a	Dependent on timing of development
16	Facilitate expansion of the Crossway Baptist Church within the guidelines of the UDF	CoW - Development, Strategy & Business Services	Crossway Baptist Church	N/a	Dependent on timing of development
17	Facilitate master planning of the balance of the Global Television Studios site	CoW - Development, Strategy & Business Services	Landowners	N/a	Dependent on timing of development


Improve interface between park and GTV studios
Provide buffer to residential area
Exisiting use (storage of buses) is inconsistent with mixed-use zoning and surrounding uses
Privately-owned land not subject to control by the Whitehorse Planning Scheme
Residential zoning is inconsistent with existing satellite station use
Provide buffer to residential area
Vacant land with planning approval for residential development
Medical centre
Provide buffer to residential area
Existing use (hotel) is inconsistent with residential zoning.
Vacant land. Presentation at corner of major intersection. Owners have commercial interests.
Lack of convenience retail and business services e.g. Post Office, Supermarket
Vacant land with planning approval for at-grade carpark. Owned by religious institution.
Provide buffer to residential area
Vacant land without planning approval for specific use. Owned by religious institution.
KEY
AGED CARE / RETIREMENT / INDEPENDENT LIVING
COMMERCIAL
EDUCATION
HEALTHCARE
HOSPITALITY
PARKS & RECREATION
RELIGIOUS INSTITUTION
RESIDENTIAL
0 50 100 150 m

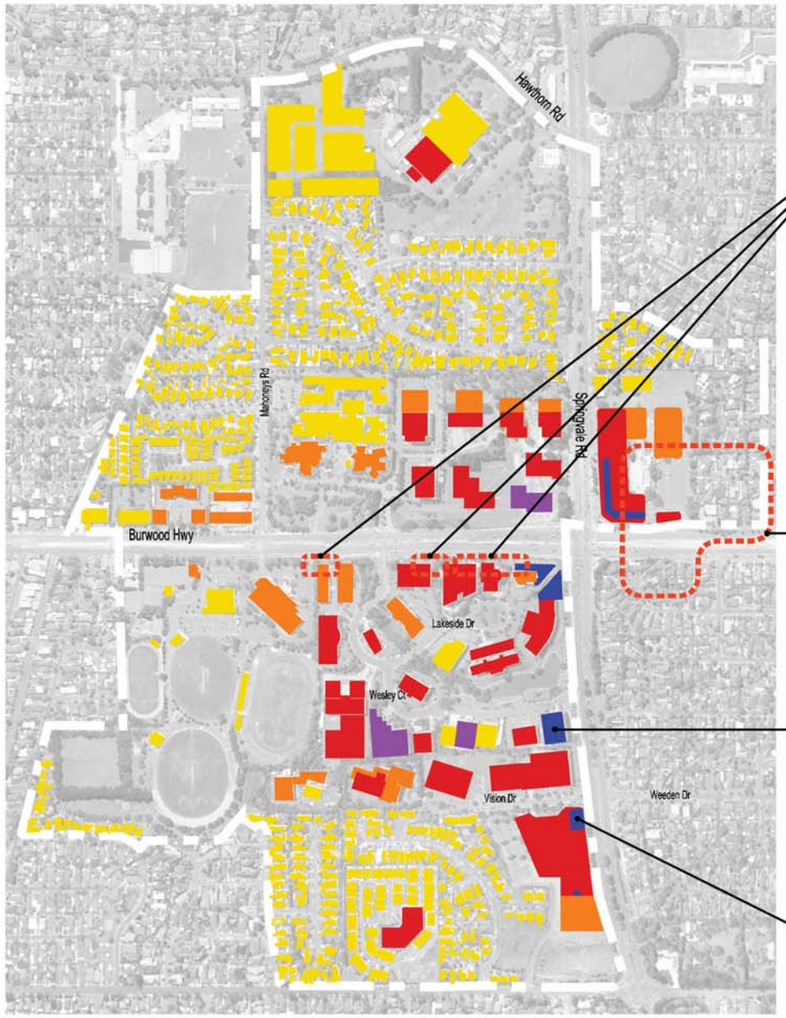


KEY

CA	COMMONWEALTH LAND NOT CONTROLLED BY PLANNING SCHEME
B2Z	BUZINESS 2 ZONE
MUZ	MIXED USE ZONE
PPRZ	PUBLIC PARK AND RECREATION ZONE
PUZ2	PUBLIC USE ZONE EDUCATION
R1Z	RESIDENTIAL 1 ZONE
RDZ1	ROAD ZONE CATEGORY 1
SUZ1	SPECIAL USE ZONE 1

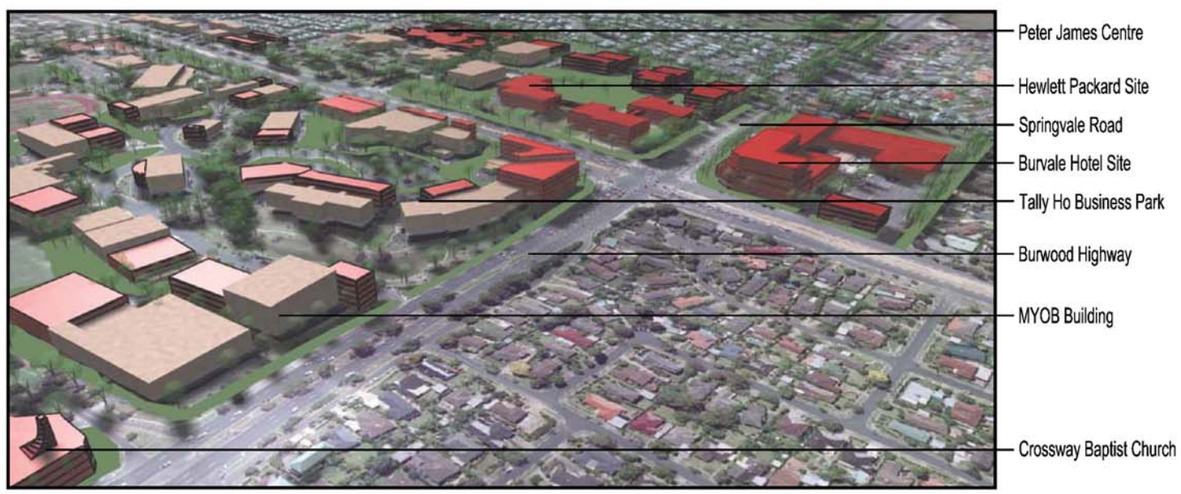
0 50 100 150 m

EXISTING BUILT FORM



PREFERRED FUTURE BUILT FORM

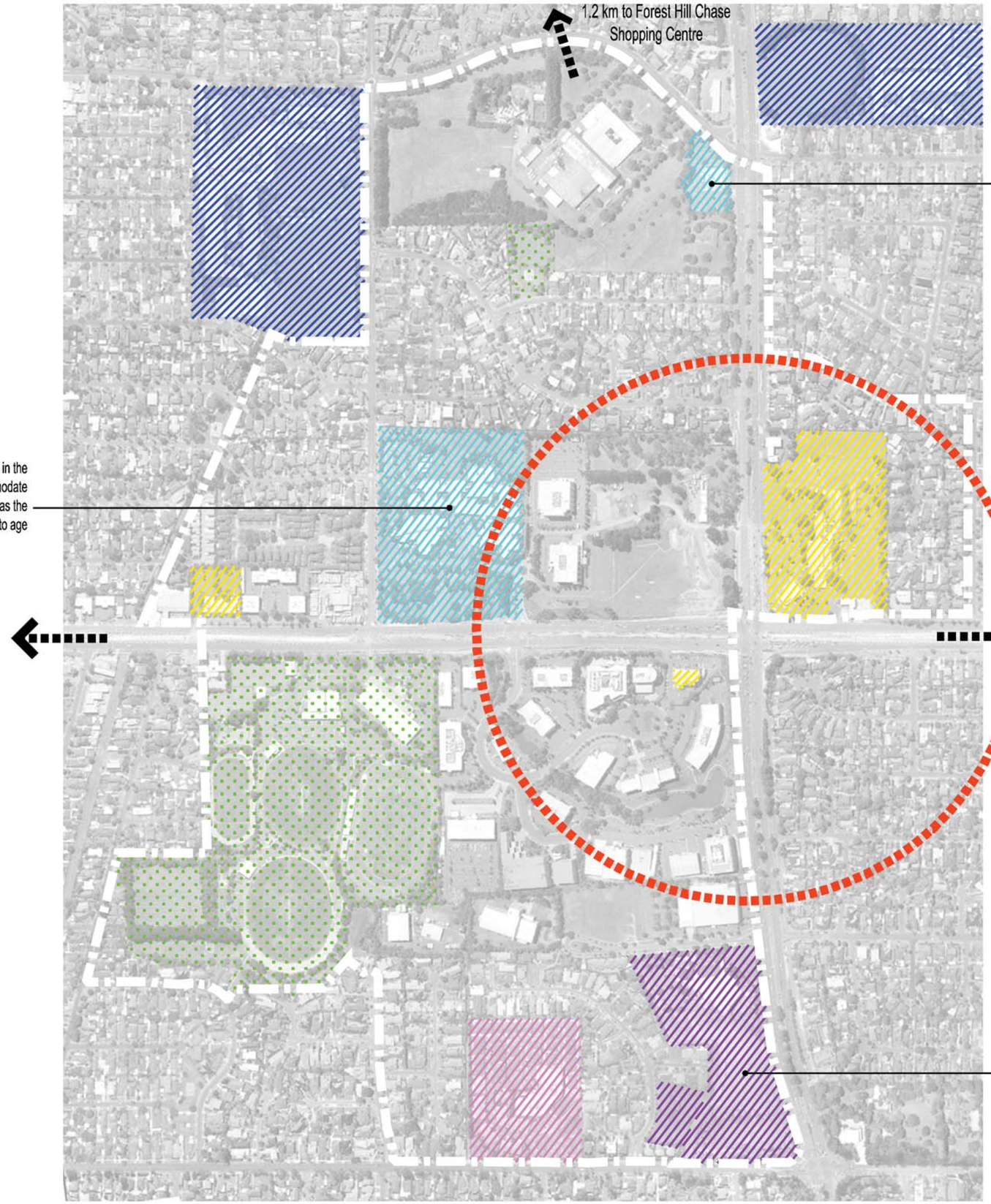
ARTIST'S IMPRESSION OF POTENTIAL DEVELOPMENT:
AERIAL VIEW LOOKING EAST ALONG BURWOOD HIGHWAY



ARTIST'S IMPRESSION OF POTENTIAL DEVELOPMENT: AERIAL VIEW LOOKING NORTH WEST

KEY

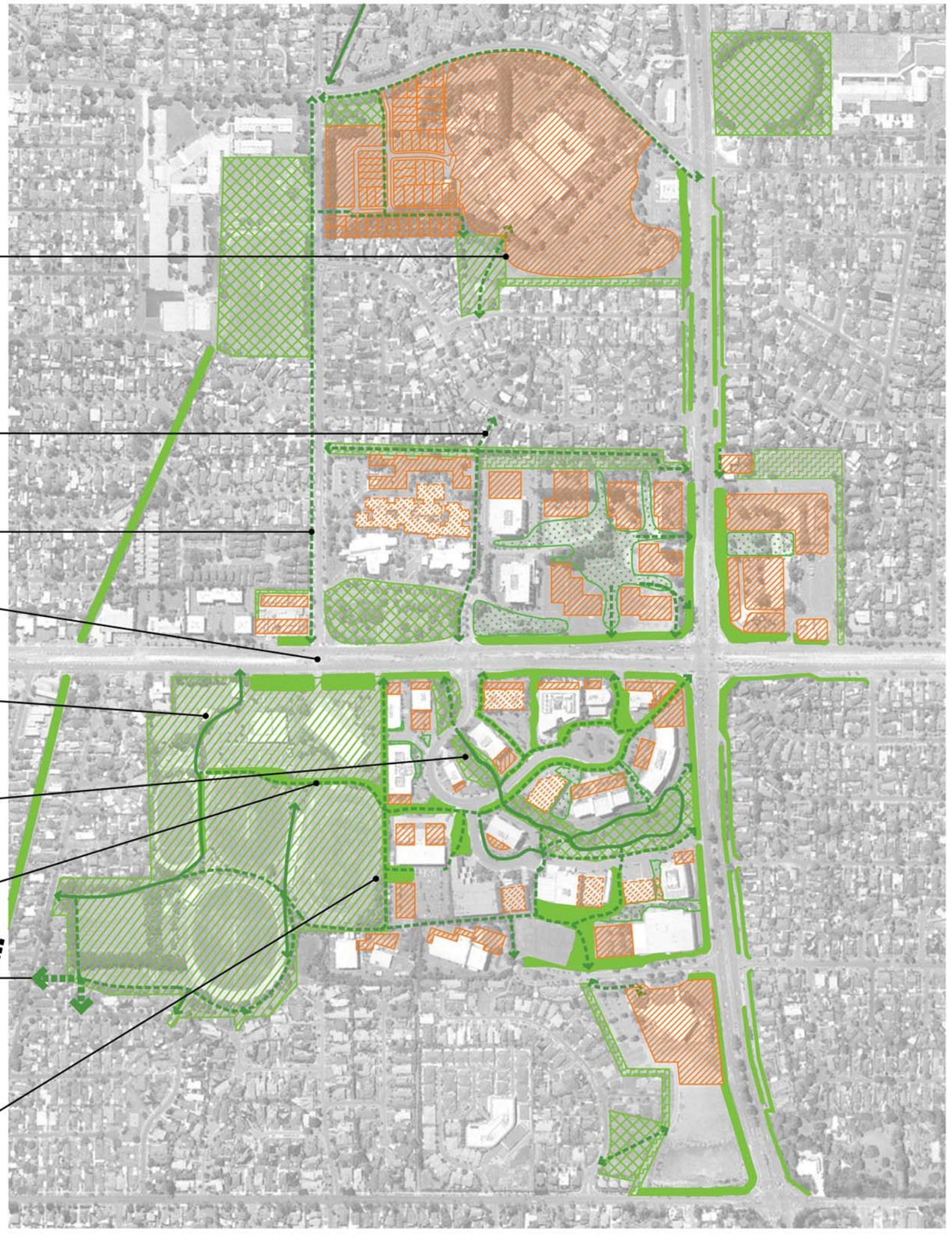
- 1-2 STOREYS
- 2-3 STOREYS
- 3-4 STOREYS
- 4-5 STOREYS
- 5-6 STOREYS



KEY

- AGED CARE / RETIREMENT / INDEPENDENT LIVING
- EDUCATION
- HEALTHCARE
- HOSPITALITY
- PARKS & RECREATION
- RELIGIOUS INSTITUTION

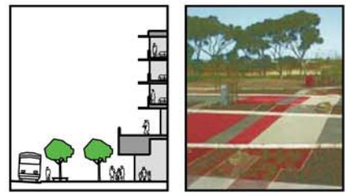
0 50 100 150 m



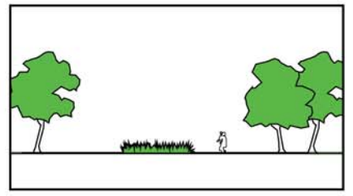
KEY

- Existing public open space
- Other open space
- Increased landscaping resulting from relocation of at-grade parking to multilevel parking structures
- Strengthen existing landscaped areas to improve pedestrian and visual amenity
- Landscape buffer
- Potential for future development
- Potential to increase height of buildings
- Existing pedestrian path
- Potential pedestrian path

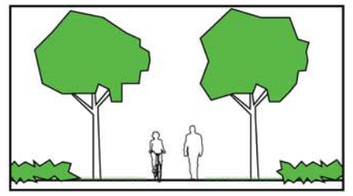
LANDSCAPE TYPES



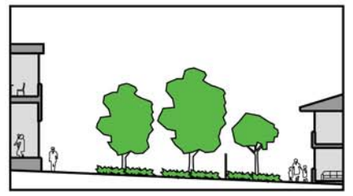
MAIN ROAD FRONTAGES
Stylised frontage treatment with integration of dramatic colour, massed planting and wider pavements.



CAMPUS OPEN SPACE
Typically open grasslands with scattered Eucalypts and addressing areas of highly detailed landscape design such as waterways and detailed garden beds.



LOCAL CIRCULATION SPACES
For easy pedestrian and bicycle movements.



TRANSITIONAL
Typically areas that transition from one landscape type to another.
e.g. Buffer zones between existing residential and other uses or areas diminishing from a main road frontage into a woodland environment within a site.

Consider creating link to residential street and activate Reserve corner in the event that sites become available for purchase or redevelopment

Potential bicycle link along pipe reserve

Relocate bus stop closer to intersection

Improve identity of, access to and enhance appearance of tram Superstops

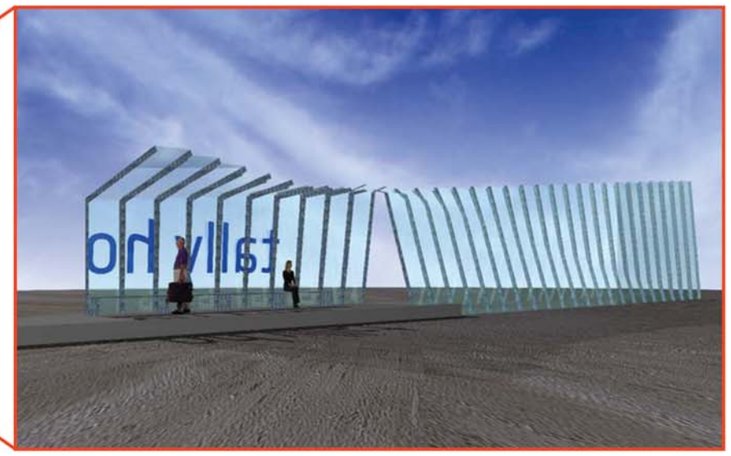
Increase pedestrian and bicycle connectivity to and between key activity nodes and surrounding areas

To Scotchman's Creek Trail

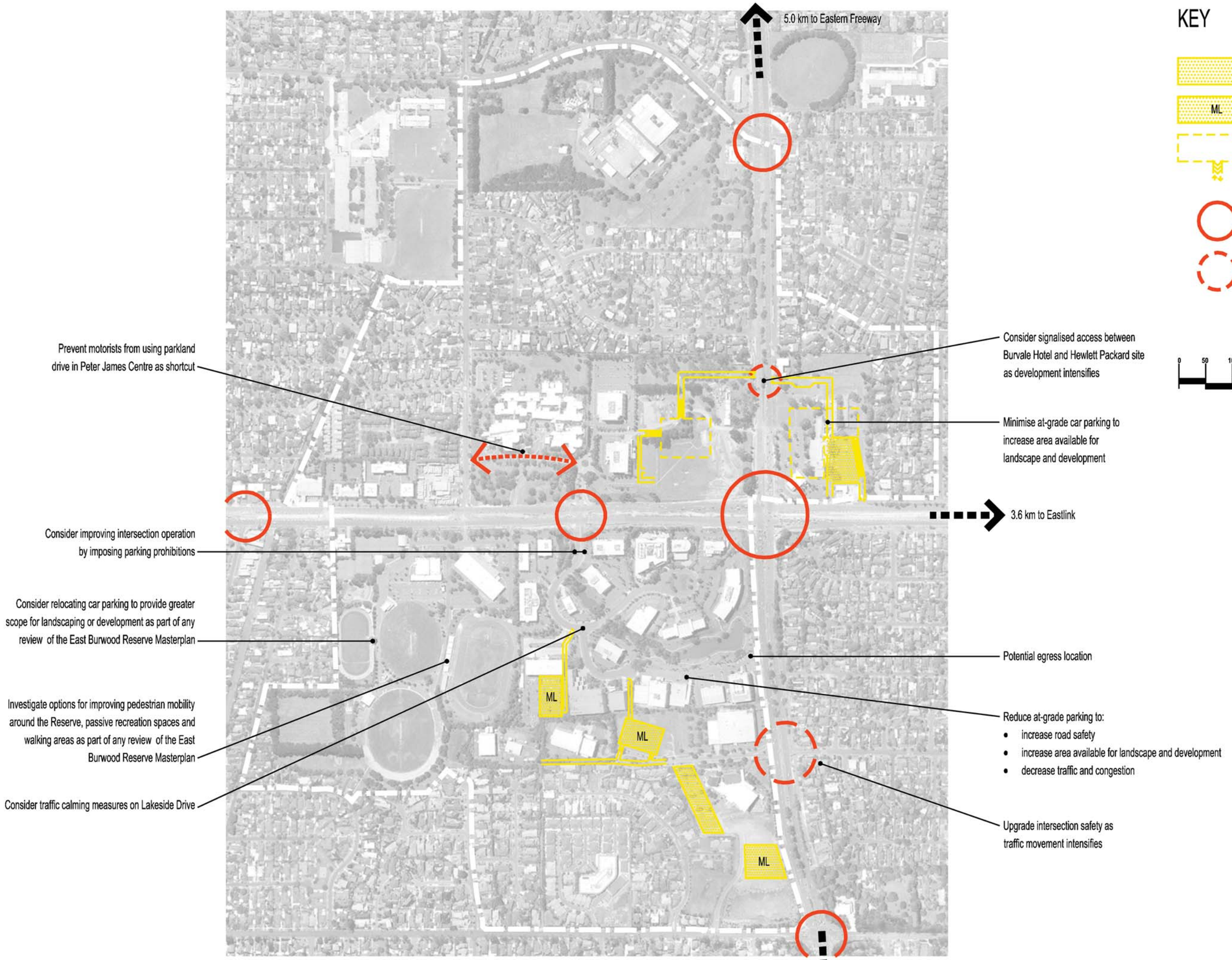
KEY

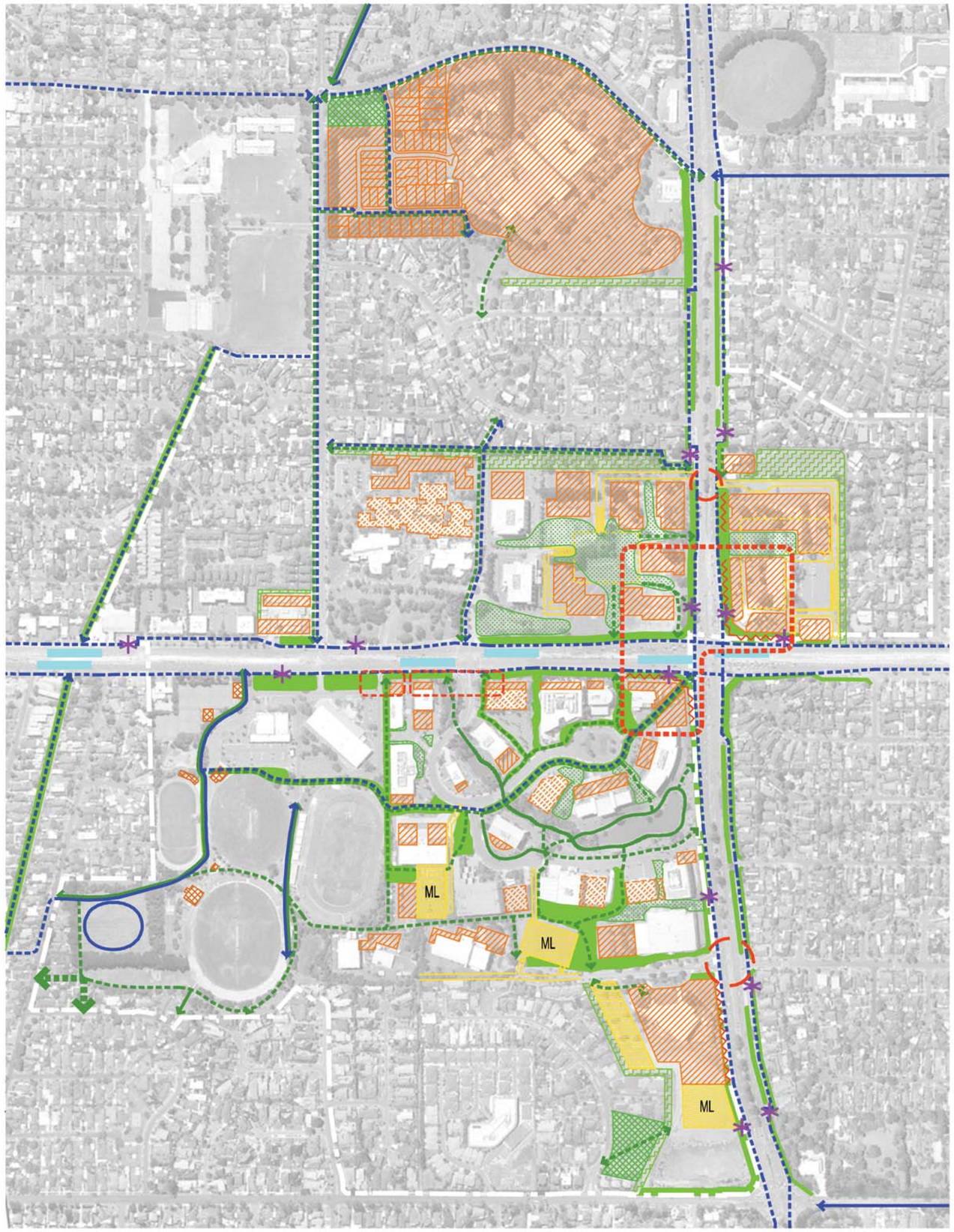
- Existing Bike Path
- Potential Bike Path
- 75 Tram Superstop
- Bus Stops
  - Smart Bus Routes 888, 889 (Springvale Rd)
  - Bus Route 732 (Burwood Hwy)

0 50 100 150 m



Artist's impression of "Knowledge Spine" Tram Superstop


5.0 km to Eastern Freeway
Prevent motorists from using parkland drive in Peter James Centre as shortcut
Consider signalised access between Burvale Hotel and Hewlett Packard site as development intensifies
Minimise at-grade car parking to increase area available for landscape and development
3.6 km to Eastlink
Consider improving intersection operation by imposing parking prohibitions
Consider relocating car parking to provide greater scope for landscaping or development as part of any review of the East Burwood Reserve Masterplan
Investigate options for improving pedestrian mobility around the Reserve, passive recreation spaces and walking areas as part of any review of the East Burwood Reserve Masterplan
Consider traffic calming measures on Lakeside Drive
ML
ML
ML
Potential egress location
Reduce at-grade parking to:
• increase road safety
• increase area available for landscape and development
• decrease traffic and congestion
Upgrade intersection safety as traffic movement intensifies
5.1 km to Monash Freeway
KEY
Potential new at-grade carparking
ML
Potential new multi-level carparking
Potential new underground carpark (with entry ramp)
Existing signalised intersection
Potential upgrade of intersection by signalisation, improved signage or other measures
0
50
100
150 m



KEY

- Potential for future development
- Potential to increase height of buildings
- Potential consolidation of building use and sharing of facilities.
- Potential increased landscaping resulting from replacement of at-grade parking with multilevel parking (indicative)
- Potential to strengthen existing landscaped areas to improve pedestrian and visual amenity
- Potential landscape buffer
- Other open space
- ML — Potential new multi-level carparking (options)
- Potential new at-grade carparking (options)
- Potential new underground carpark
- Articulation of
  - major intersection
  - entries to key sites
- Existing Bike Path
- Potential Bike Path
- Existing Pedestrian Path
- Potential Pedestrian Path
- 75 Tram Superstop
- Bus Stops
  - Smart Bus Routes 888, 889 (Springvale Rd)
  - Bus Route 732 (Burwood Hwy)
- Potential upgrade of intersection by signalisation, improved signage or other measures
- Active Street Frontage

0 50 100 150 m

OBJECTIVES

ECONOMIC SUSTAINABILITY

- To develop Tally Ho as an activity centre that meets the diverse needs of both business users and the broader community.

BUILT FORM & DENSITY

- To create a built environment that is attractive, safe and establishes a strong sense of place.
- To develop new built form characterised by architectural design excellence.
- To enable additional capacity to be achieved without unreasonable impacts on surrounding residential areas.

ENVIRONMENTAL SUSTAINABILITY

- To create a sustainable environment.

OPEN SPACE, CONNECTIVITY & LINKAGES

- To enhance the quality, extent and interconnectivity of pedestrian and cycle linkages through the Tally Ho MAC and connecting to surrounding networks.

STREETSCAPES & LANDSCAPES

- To provide high quality and visually continuous streetscapes along Hawthorn Rd , Mahoneys Rd and Springvale Rd.
- To encourage retention of significant vegetation within the site.
- To achieve high quality resolution of interfaces between areas of different land uses.

LAND USE & ZONING

- To provide high quality and increased mix of uses and activity at the intersection of Hawthorn Rd and Springvale Rd.

STRATEGIES

BUILT FORM AND DENSITY

- Ensure that building development responds to characteristics of surrounding streets and places.
- Ensure additional built form capacity is achieved in conjunction with development of high quality streetscape networks and amenity.

ENVIRONMENTAL SUSTAINABILITY

- Ensure that new building development incorporates benchmark best practice environmentally sustainable measures.

OPEN SPACE, CONNECTIVITY & LINKAGES

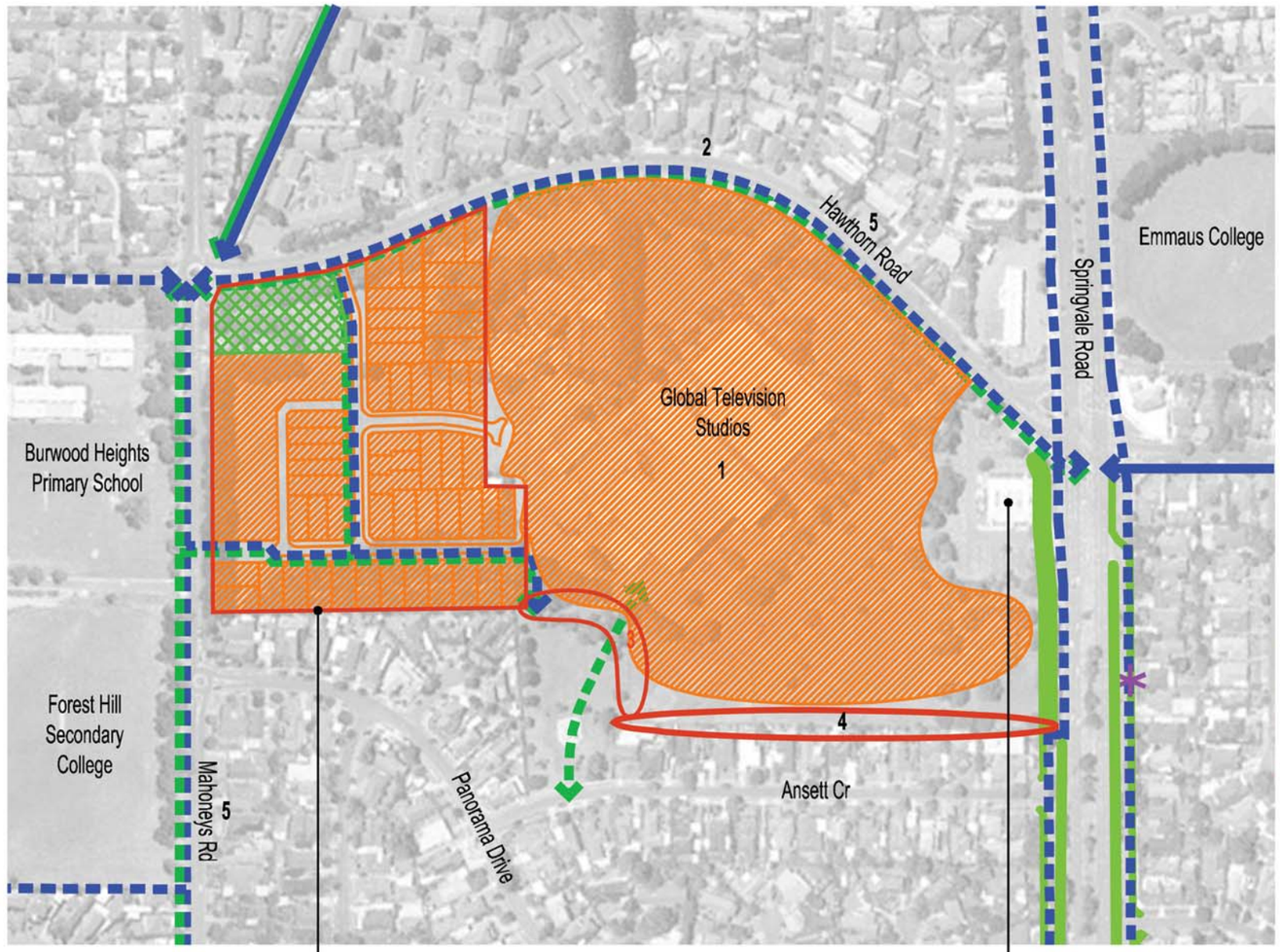
- Upgrade, expand and integrate network of pedestrian and cycle pathways through the Tally Ho MAC and connecting to surrounding networks.
- Develop initiatives that improve the safety of the pedestrian and bicycle network through:
  - expansion of off-road network
  - solar powered lighting along pedestrian/bicycle corridors
  - activation of interfaces to pedestrian and bicycle corridors
  - increased visual surveillance of networks from ground and upper floors of surrounding buildings
- Improve attractiveness, extent and capacity of pedestrian areas.
- Liase with Melbourne Water to upgrade the pipeline bicycle track to reflect its significance in the regional bike network.

STREETSCAPES AND LANDSCAPES

- Ensure the future treatments of Mahoneys Rd, Hawthorn Rd and Springvale Rd provide a coherent and continuous visual streetscape identity and quality.
- Improve resolution of interfaces between the schools, GTV Studios, public open space and residential areas through careful management of the built form, landscaping and building treatments.

LAND USE & ZONING

- Identify amendments to the Whitehorse Planning Scheme that will facilitate implementation of the vision and objectives of the Tally Ho UDF.



ACTIONS

1. Consider possible land uses :
   - Film and Television industry
   - Medium Density Residential
2. Improve bicycle and pedestrian connectivity.
3. Improve park interfaces.
4. Provide appropriate design responses to residential interfaces.
5. Improve pedestrian amenity and streetscape.
6. Future developments must produce Traffic Impact Assessments to allow assessment of traffic volume increases and patterns.

KEY

- Potential for future development
- Strengthen existing landscaped areas to improve pedestrian and visual amenity
- Other open space
- Existing Bike Path
- Potential Bike Path
- Existing Pedestrian Path
- Potential Pedestrian Path
- Bus Stops
  - Smart Bus Routes 888, 889 (Springvale Rd)
  - Bus Route 732 (Burwood Hwy)

0 25 50 75 100m

OBJECTIVES

ECONOMIC SUSTAINABILITY

- To develop Tally Ho as an activity centre that meets the diverse needs of both business users and the broader community.

BUILT FORM & DENSITY

- To develop new built form that articulates a gateway character and contributes to the identity of the precinct.
- To enable additional capacity to be achieved without unreasonable impacts on surrounding residential areas.

ENVIRONMENTAL SUSTAINABILITY

- To create a sustainable environment.

TRANSPORT & CAR PARKING

- To meet current and future car parking needs without a deleterious effect on landscape and amenity.

OPEN SPACE, CONNECTIVITY & LINKAGES

- To foster a culture of walking, cycling and public transport utilisation.

STREETSCAPES & LANDSCAPES

- To create vibrant, active and safe streets, particularly at the intersection of Burwood Hwy and Springvale Rd.
- To provide high quality and visually continuous streetscapes.

LAND USE & ZONING

- To provide high quality and increased mix of activity at the intersection of Burwood Hwy and Springvale Rd.

COMMUNITY

- To provide places and facilities for the area's resident and working population to interact and form community links.

STRATEGIES

ECONOMIC SUSTAINABILITY

- Encourage the introduction of a greater mix of complementary uses that fill current areas of high need, notably retail, business services, short term accomodation and high quality conferencing facilities.

BUILT FORM AND DENSITY

- Ensure that form and scale of new development is determined by factors such as local topography, the framing/protection of views and the form and scale of abutting developments/uses.

ENVIRONMENTAL SUSTAINABILITY

- Ensure that new building development incorporates benchmark best practice environmentally sustainable measures.
- Seek to expand the planting strategy along the Burwood Hwy and Springvale Rd corridors and retain existing canopy trees.
- Implement principles of water-sensitive design for all roads and open spaces.
- Establish a Development Contributions Plan, where applicable, to support the upgrade and maintenance of enhanced streetscapes and public transport facilities.

TRANSPORT & CAR PARKING

- Develop at-grade and underground carparking provision to maximise the efficient utilisation of the facilities.
- Improve the visual prominence and quality of patron amenities at tram/bus Super stops.

OPEN SPACE, CONNECTIVITY & LINKAGES

- Improve attractiveness, extent and capacity of pedestrian areas.

STREETSCAPES AND LANDSCAPES

- Encourage the creation of high quality, generously scaled pedestrian environments characterised by more planting along streets and entry squares to key buildings and activity nodes. Encourage interesting and activated building interfaces with a particular emphasis on key intersections and public transport nodes to improve pedestrian safety through passive surveillance.

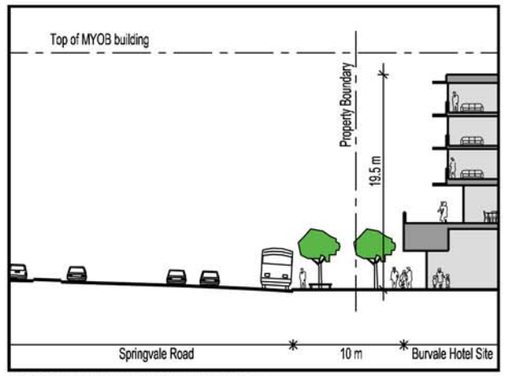
LAND USE & ZONING

- Identify amendments to the Whitehorse Planning Scheme that might facilitate implementation of the vision and objectives of the Tally Ho UDF.

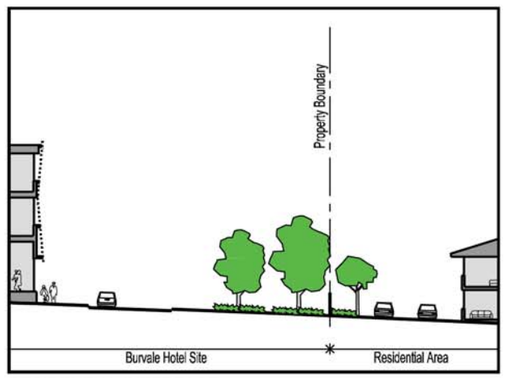
COMMUNITY

- Support the development of local retail services and facilities, e.g. a supermarket, postal services and childcare, to meet the needs of the local walking and public transport-using population along with the local worker population.

SITE PLAN



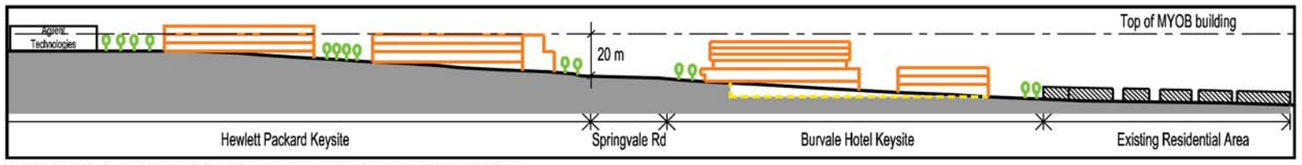
SPRINGVALE ROAD INTERFACE



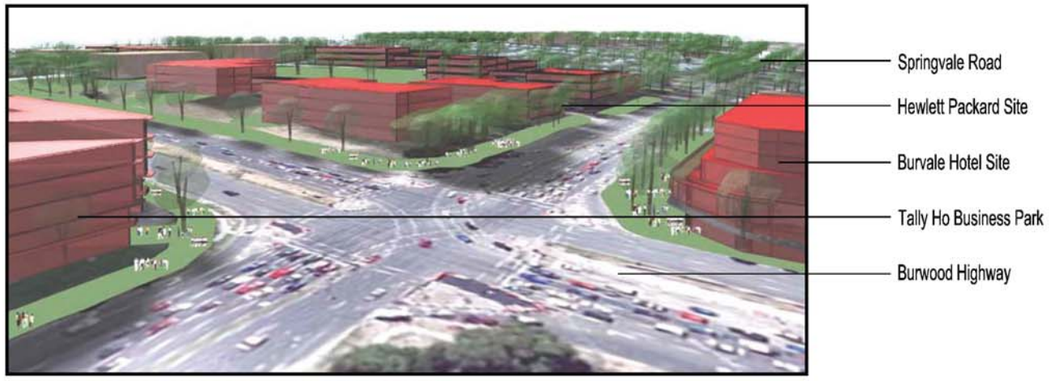
RESIDENTIAL INTERFACE

ACTIONS

1. Establish landscape buffer (with grey water recycling) to adjacent residential areas
2. Consider possible land uses:
   a. Landscaped outdoor entertainment area.
   b. Entertainment facility.
   c. Hospitality facility.
   d. Drop-off zone.
   e. Privately-operated underground parking.
   f. Commercial/conference facility at first floor level.
   g. Convenience and speciality retail to provide active frontage.
   h. Supermarket.
   i. At-grade carpark.
   j. Liquor sales.
   k. Commercial development at first floor level.
   l. Short term accomodation at second floor level (90 accomodation units).
3. Articulate and reinforce intersection with new built form. A maximum building height of 20 metres above ground level (measured from 113 metres AHD) is possible.
4. Relocate bus stop closer to intersection.
5. Improve pedestrian access to Tram Superstop.
6. Possible signalisation of intersection.
7. Extend footpath along east side of Springvale Rd.
8. Consider possible land uses:
   - Convenience shop (subject to rezoning)
   - Childcare centre
   - Petrol station associated with adjacent supermarket
   - Carwash



SECTION A-A: POTENTIAL BUILT FORM ELEVATIONAL PROFILE



ARTIST'S IMPRESSION OF POTENTIAL DEVELOPMENT:
AERIAL VIEW OF SPRINGVALE ROAD / BURWOOD HIGHWAY INTERSECTION

KEY

- Opportunity for future development
- Strengthen existing landscaped areas to improve pedestrian and visual amenity
- Landscape buffer
- Increased landscaping resulting from relocation of at-grade parking to multilevel parking structures
- Opportunity for underground carpark
- Potential Pedestrian Path
- Potential Bicycle Lane
- 75 Tram Superstop
- Bus Stops
  - Smart Bus Routes 888, 889 (Springvale Rd)
  - Bus Route 732 (Burwood Hwy)
- Active street frontage

0 25 50 75 100m

OBJECTIVES

ECONOMIC SUSTAINABILITY

- To strengthen the centre's role as a high tech business hub of state significance.

BUILT FORM & DENSITY

- To create a built environment that is attractive, safe and establishes a strong sense of place.
- To accomplish required growth within the Tally Ho MAC within a consistent urban built form solution.

ENVIRONMENTAL SUSTAINABILITY

- To create a sustainable urban environment.

TRANSPORT & CAR PARKING

- To meet current and future car parking needs without a deleterious effect on landscape and amenity.
- To improve safety of vehicular and pedestrian movements at intersections and across major roads, particularly Burwood Hwy and Springvale Rd.

OPEN SPACE, CONNECTIVITY & LINKAGES

- To enhance the quality, extent and interconnectivity of landscaping and pedestrian and cycle linkages through the Tally Ho MAC and connecting to surrounding networks.
- To foster a culture of walking, cycling and public transport utilisation.

STREETSCAPES & LANDSCAPES

- To provide high quality and visually continuous streetscapes along Burwood Hwy and Springvale Rd.
- To achieve high quality resolution of interfaces between areas of different land uses.

LAND USE & ZONING

- To facilitate the development of land uses consistent with the vision and objectives of the Tally Ho UDF.

STRATEGIES

ECONOMIC SUSTAINABILITY

- Seek to create an education and knowledge corridor along Burwood Hwy that links educational institutions e.g. Deakin University, Mount Scopus College, Forest Hill SC and Emmaus College, and leading-edge businesses located in the Greenwood and Tally Ho Business Parks.

BUILT FORM & DENSITY

- Improve the capacity and flexibility of building stock in the business park.
- Ensure that form and scale of new development along Burwood Highway & Springvale Rd is visually prominent and creates an identity for the area but does not have a detrimental effect on amenity.

ENVIRONMENTAL SUSTAINABILTY

- Develop principles for car parking provision and green travel plans.
- Establish a Development Contributions Plan, where applicable, to support the upgrade and maintenance of enhanced streetscapes and public transport facilities.

TRANSPORT & PARKING

- Develop an Integrated Transport Plan incorporating sustainable transport and traffic studies informed by detailed trip pattern analyses.
- Encourage development of commercial multi deck carparking facilities at key activity nodes to reduce at-grade parking and cater for demand 7 days a week.

OPEN SPACE, CONNECTIVITY & LINKAGES

- Upgrade, expand and integrate network of pedestrian and cycle pathways through the Tally Ho MAC and connecting to surrounding networks.
- Improve the visual prominence and quality of patron amenities at tram/bus Super stops and improve the identity for the business and education corridor linking Deakin University and Tally Ho.

STREETSCAPES & LANDSCAPES

- Encourage the creation of high quality, generously scaled pedestrian environments characterised by more planting along streets and entry squares to key buildings and activity nodes. Encourage interesting and activated building interfaces with a particular emphasis on key intersections and public transport nodes to improve pedestrian safety through passive surveillance.

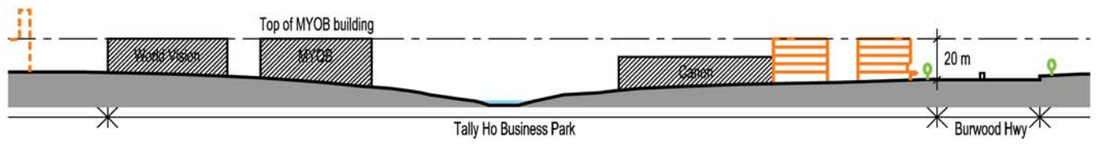
LAND USE & ZONING

- Identify amendments to the Whitehorse Planning Scheme that might facilitate implementation of the vision and objectives of the Tally Ho UDF.

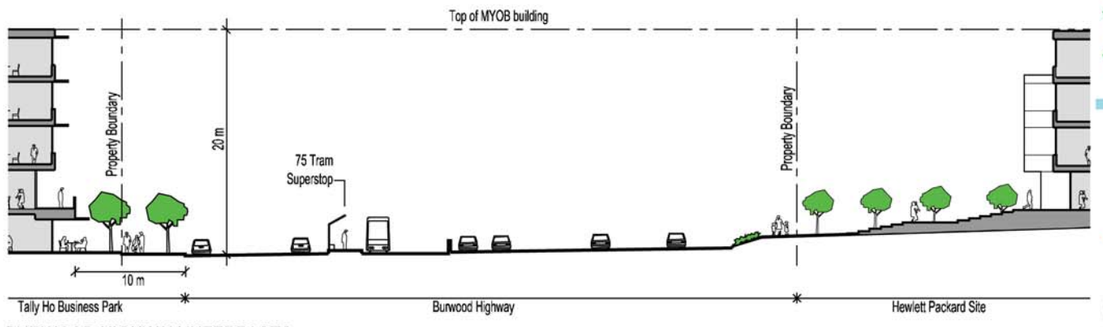
COMMUNITY

- Support the development of local retail services and facilities, e.g. a supermarket, postal services and childcare, to meet the needs of the local walking and public transport-using population along with the local worker population.

SITE PLAN



SECTION B-B: POTENTIAL BUILT FORM ELEVATIONAL PROFILE



BURWOOD HIGHWAY INTERFACES

ACTION

1. Articulate entries to Reserve and Business Park with new built form.
2. Establish pedestrian and bicycle linkages between Business Park and Reserve.
3. Enhance pedestrian linkages with new green corridors.
4. Potential for a privately-operated multistorey carpark servicing Business Park during working week and servicing Reserve on weekends.
5. Potential for a privately-operated multistorey carpark servicing Crossway Baptist Church on weekends and servicing Business Park during working week.
6. Establish pedestrian linkages connecting East Burwood Reserve, Business Park and active hub at intersection of Burwood Hwy and Springvale Rd. Opportunity to enhance pedestrian amenity in Business Park.
7. Articulate an active hub at the intersection of Burwood Hwy and Springvale Rd with new built form. A maximum building height of 20 metres above ground level (measured from 113 metres AHD) is possible. Opportunity for retail at ground level to create active street interface.
8. Improve pedestrian access to Tram Superstop.
9. Improve safety of vehicular and pedestrian movements by upgrading of intersection e.g. by signalisation, improved signage or other measures.
10. Improve access to site.
11. Update zoning classification of National Archives site to better reflect surrounding uses.
12. Consider implementation of the following traffic and parking measures (refer Appendix 1):
    a. Introduction of consolidated short-term parking on one side of the road network.
    b. Conversion of long-term parking to pay parking.
    c. Review of the parking permit scheme for the East Burwood Reserve.
    d. Improve the operation of the Lakeside Drive/Burwood Highway/Woodvale Court intersection .
    e. Introduction of traffic calming devices and No Stopping restrictions to improve traffic conditions in Wesley Court.

KEY

- Potential for increased building footprint resulting from relocation of at-grade parking to multilevel parking
- Potential to increase height of building (subject to relocation of at-grade parking to multilevel parking)
- Opportunity for increased landscaping resulting from relocation of at-grade parking to multilevel parking
- Strengthen existing landscaped areas to improve pedestrian and visual amenity
- Potential for privately-operated multistorey carparking.
- Potential Bike Path
- Potential Pedestrian Path
- Existing Pedestrian Path
- 75 Tram Superstop
- Bus Stops
  - Smart Bus Routes 888, 889 (Springvale Rd)
  - Bus Route 732 (Burwood Hwy)
- Active street frontage

0 25 50 75 100m

OBJECTIVES

BUILT FORM & DENSITY

- To accomplish required growth within the Tally Ho MAC within a consistent urban built form solution.
- To enable additional capacity to be achieved without unreasonable impacts on surrounding residential areas.

ENVIRONMENTAL SUSTAINABILITY

- To create a sustainable environment.

TRANSPORT & PARKING

- To meet current and future car parking needs without a deleterious effect on landscape and amenity.
- To improve safety of vehicular and pedestrian movements at intersections and across major roads, particularly Burwood Hwy and Springvale Rd.

OPEN SPACE, CONNECTIVITY & LINKAGES

- To enhance the quality, extent and interconnectivity of landscaping and pedestrian and cycle linkages through the Tally Ho MAC and connecting to surrounding networks.

STREETSCAPES & LANDSCAPES

- To provide high quality and visually continuous streetscapes along Burwood Hwy and Springvale Rd.
- To achieve high quality resolution of interfaces between areas of different land uses.

LAND USE & ZONING

- To provide high quality and increased mix of activity in new and existing developments.

COMMUNITY

- Ensure the long term viability of the Church's facilities and services including its need to continue to grow and change to meet emerging community needs.

STRATEGIES

BUILT FORM AND DENSITY

- Ensure additional built form capacity is achieved in conjunction with development of high quality streetscape networks and amenity.
- Ensure the form and scale of new development is determined by factors such as local topography, the framing/protection of views and the form and scale of abutting developments/uses.

ENVIRONMENTAL SUSTAINABILITY

- Ensure that new building development incorporates benchmark best practice environmentally sustainable measures.
- Establish a planting strategy for the Springvale Rd corridor within the land holding and, where possible, within the road reserves.

TRANSPORT & CAR PARKING

- Encourage development of commercial multi deck carparking facilities at key activity nodes to reduce at-grade parking and cater for demand 7 days a week.
- Seek to improve the safety of vehicular and pedestrian movements at key intersections and major roads (Burwood Hwy/ Mahoneys Rd and Springvale Rd/ Vision Drive).
- Improve the visual prominence and quality of patron amenities at tram/bus Super stops.

OPEN SPACE, CONNECTIVITY & LINKAGES

- Improve attractiveness, extent and capacity of pedestrian areas. Provide resting/seating points along pedestrian links.

STREETSCAPES AND LANDSCAPES

- Encourage the creation of high quality, generously scaled pedestrian environments characterised by more planting along streets and entry squares to key buildings and activity nodes. Encourage interesting and activated building interfaces with a particular emphasis on key intersections and public transport nodes to improve pedestrian safety through passive surveillance.

COMMUNITY

- Support partnerships in surrounding land uses to ensure maximum use is achieved for car parking and infrastructure.

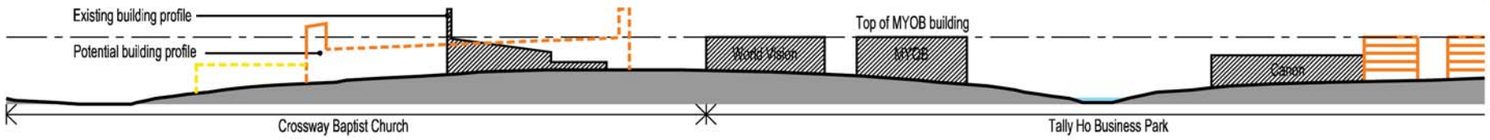
ACTIONS

1. Provide an active interface between the Church and the footpath along the Springvale Rd frontage.
2. Establish a privately-operated multistorey carpark servicing Crossway Baptist Church on weekends and servicing Business Park during working week.
3. Provide a landscape buffer between religious institution and residential area.
4. Consolidate at-grade carparking.
5. Increased visual presence of Church.
6. Improve safety of vehicular and pedestrian movements by upgrading of intersection e.g. by signalisation, improved signage or other measures.
7. Establish a stepped/multi-level carpark to serve church parishoners.

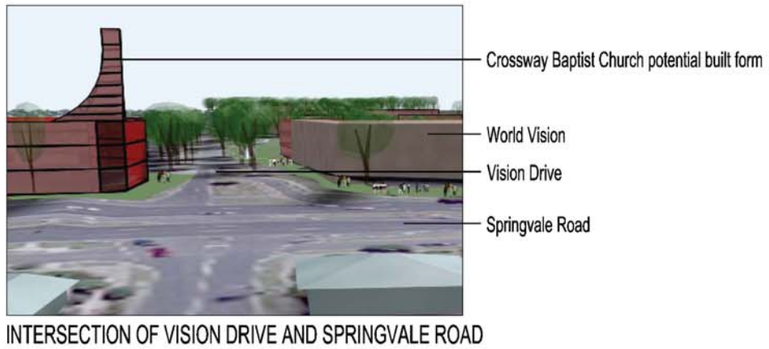
KEY

- Opportunity for future development
- Strengthen existing landscaped areas to improve pedestrian and visual amenity
- Opportunity for increased landscaping resulting from relocation of at-grade parking to multilevel parking structures
- Potential carparking areas
- Potential Pedestrian Path
- Potential Bicycle Lane
- Bus Stops
  - Smart Bus Routes 888, 889 (Springvale Rd)
  - Bus Route 732 (Burwood Hwy)
- Active street frontage

0 25 50 75 100m



SECTION C-C: POTENTIAL BUILT FORM ELEVATIONAL PROFILE



INTERSECTION OF VISION DRIVE AND SPRINGVALE ROAD

OBJECTIVES

BUILT FORM & DENSITY

- To create a built environment that is attractive, safe and establishes a strong sense of place.
- To maximise the efficient use of buildings.

ENVIRONMENTAL SUSTAINABILITY

- To create a sustainable environment.

TRANSPORT & PARKING

- To create high quality amenity for all users of the Tally Ho MAC (pedestrians, cyclists and motorists).
- To meet current and future car parking needs without a deleterious effect on landscape and amenity.
- To improve safety of vehicular and pedestrian movements at intersections and across major roads, particularly Burwood Hwy and Springvale Rd.

OPEN SPACE, CONNECTIVITY & LINKAGES

- To enhance the quality and extent of landscaping in existing open space areas.
- To enhance the quality, extent and interconnectivity of pedestrian and cycle linkages through the Tally Ho MAC and connecting to surrounding networks.
- To foster a culture of walking, cycling and public transport utilisation.

STREETSCAPES & INTERFACES

- To provide high quality and visually continuous streetscapes
- To achieve high quality resolution of interfaces between areas of different land uses.

LAND USE & ZONING

- To provide high quality and increased mix of activity in new and existing developments.

COMMUNITY

- To provide places and facilities for the area's resident and working population to interact and form community links.
- To ensure the long term viability of vital existing community facilities and services including their need to continue to grow and change to meet emerging community needs.

STRATEGIES

BUILT FORM AND DENSITY

- Articulate entries to Reserve and Business Park with new built form.
- Consider the Tally Ho UDF objectives when reviewing the East Burwood Reserve Masterplan to ensure building footprints are minimised and where possible diminished through relocation, multi-level development and shared utilisation of facilities.

ENVIRONMENTAL SUSTAINABILITY

- Seek to expand the planting strategy along the Burwood Hwy and Springvale Rd corridors and retain existing canopy trees.
- Plant native vegetation with low water demand.

TRANSPORT & PARKING

- Explore opportunities to encourage Reserve users to utilise proposed multideck carparking in Business Park.

OPEN SPACE, CONNECTIVITY & LINKAGES

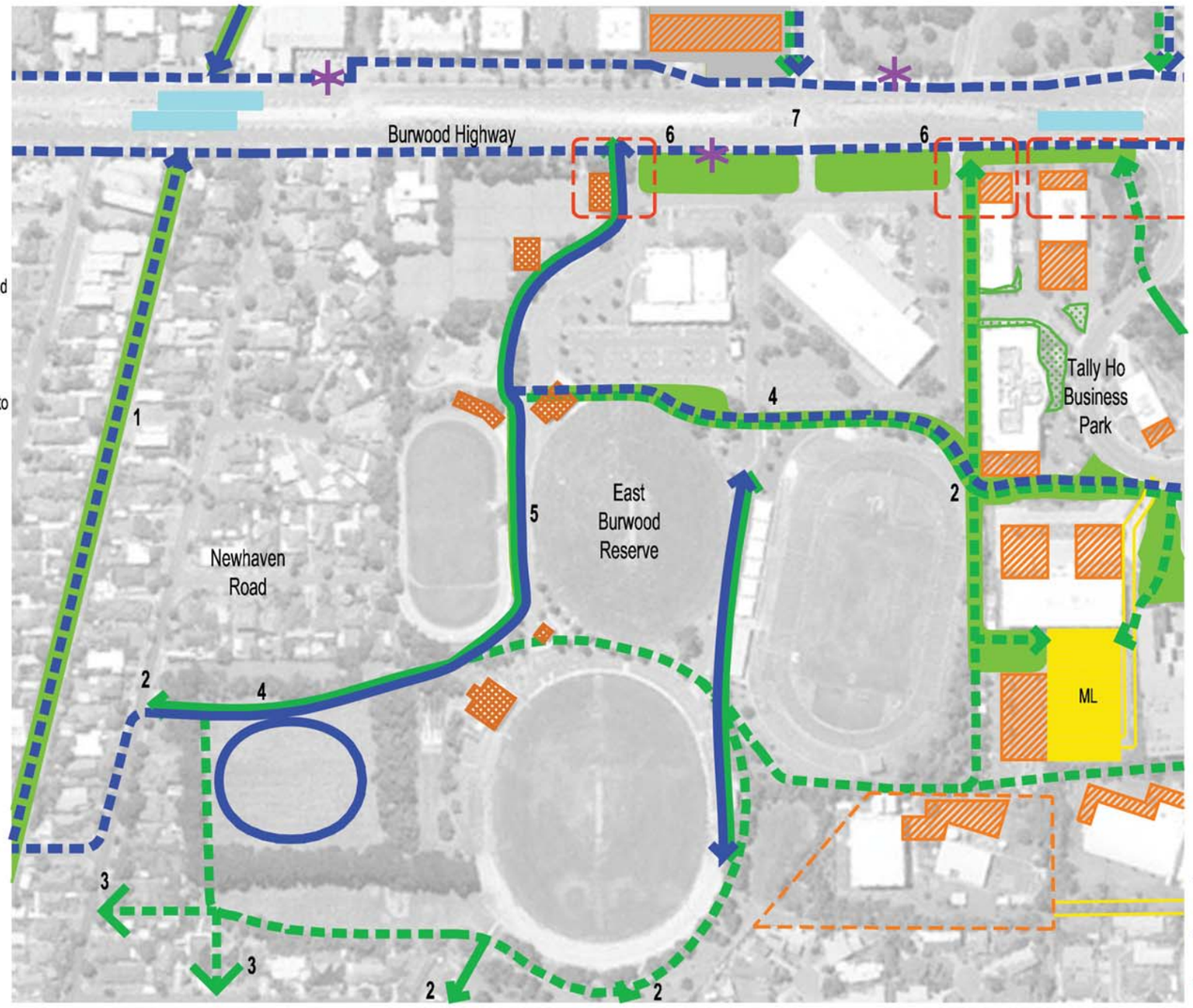
- Upgrade, expand and integrate network of pedestrian and cycle pathways through the Tally Ho MAC and connecting to surrounding networks.
- Improve attractiveness, extent and capacity of pedestrian areas. Provide resting/seating points along pedestrian links.
- Liase with Melbourne Water to upgrade the pipeline bicycle track to reflect its significance in the regional bike network.

STREETSCAPES AND LANDSCAPES

- Encourage the creation of high quality, generously scaled pedestrian environments characterised by more planting along streets and entry squares to key buildings and activity nodes. Encourage interesting and activated building interfaces with a particular emphasis on key intersections and public transport nodes to improve pedestrian safety through passive surveillance.

COMMUNITY

- Support partnerships in surrounding land uses to ensure maximum use is achieved for car parking and infrastructure.



ACTIONS

1. Potential bike link along Melbourne Water pipeline reserve.
2. Improve pedestrian and cycling linkages with adjacent areas.
3. Potential to create link to residential street and activate Reserve corner in the event that sites become available for purchase or redevelopment.
4. Establish dedicated pedestrian and cycling pathways within Reserve.
5. Potential to remove inefficient parallel parking in exchange for improved landscaping.
6. Articulate entries to Reserve and Business Park with new built form (up to 2 storeys in height) that engages with the street at ground level.
7. Improve pedestrian access to Reserve from Burwood Hwy.
8. Create promenade in Reserve at interface with Business Park.

* Refer to East Burwood Reserve Masterplan (Dec. 2001) for full details of facilities.

KEY

- Potential for future development
- Potential for consolidation of building use and sharing of facilities.
- Strengthen existing landscaped areas to improve pedestrian and visual amenity
- ML — Potential new multi-level carparking
- Existing Bike Path
- Potential Bike Path
- Existing Pedestrian Path
- Potential Pedestrian Path
- 75 Tram Superstop
- Bus Stops
  - Smart Bus Routes 888, 889 (Springvale Rd)
  - Bus Route 732 (Burwood Hwy)

0 25 50 75 100m

Note: All recommendations will be subject to review of the master plan for the reserve.

OBJECTIVES

ECONOMIC SUSTAINABILITY

- To ensure that development of the Hewlett Packard site contributes to the strengthening of the centre's role as a high tech business hub of state significance.
- To strengthen relationships between high tech commerce at the Tally Ho Business Park and Hewlett Packard and high quality education at Deakin University.

BUILT FORM & DENSITY

- To develop new built form that articulates a gateway character and contributes to the identity of the precinct at the intersection of Burwood Hwy and Springvale Rd.
- To enable additional capacity to be achieved at Crown Coaches, the Peter James Centre and Hewlett Packard without unreasonable impacts on surrounding residential areas.

ENVIRONMENTAL SUSTAINABILITY

- To ensure principles of environmentally sustainable design are applied to new development.

TRAFFIC & PARKING

- To meet current and future car parking needs without a deleterious effect on landscape and amenity.
- To improve safety of vehicular and pedestrian movements at intersections

PUBLIC OPEN SPACE, CONNECTIVITY & LINKAGES

- To enhance the quality, extent and interconnectivity of pedestrian and cycle linkages through the key sites and connecting to surrounding areas.

STREETSCAPES & INTERFACES

- To create vibrant, active and safe streets, particularly at the intersection of Burwood Hwy and Springvale Rd.
- To provide high quality and visually continuous streetscapes along Burwood Hwy and Springvale Rd.
- To achieve high quality resolution of interfaces between residential and non-residential areas.

LAND USE & ZONING

- To provide high quality and increased mix of ground level uses and activity at the Crown Coaches site and at the intersection of Burwood Hwy and Springvale Rd.

COMMUNITY

- To ensure the long term viability of the Peter James Centre.

STRATEGIES

ECONOMIC SUSTAINABILITY

- Create an education and knowledge corridor along Burwood Hwy that links educational institutions e.g. Deakin University and leading-edge businesses located at the Hewlett Packard site and Tally Ho Business Parks.
- Enable growth and flexibility in the expansion of facilities at Crown Coaches, Peter James Centre and Hewlett Packard.

BUILT FORM AND DENSITY

- To ensure additional built form capacity is achieved in conjunction with development of high quality streetscape networks and amenity along Burwood Hwy and Springvale Rd.
- Ensure that the form and scale of new development should be determined by factors such as local topography, the framing/protection of views and the form and scale of abutting developments/uses.
- Encourage the development of a masterplan for the Hewlett Packard site.

ENVIRONMENTAL SUSTAINABILITY

- Guidelines to ensure that new building development incorporates benchmark best practice environmentally sustainable measures
- Establish a planting strategy for the Burwood Hwy and Springvale Rd corridors.

TRAFFIC & PARKING

- Develop a Car Parking Strategy to reduce at-grade parking and encourage parking in centralised nodes
- Signalisation of key intersections (Burwood Highway / Mahoneys Drive and between Hewlett Packard and the Burvale Hotel) to improve safety of vehicular and pedestrian movements.

PUBLIC OPEN SPACE, CONNECTIVITY & LINKAGES

- Upgrade, expand and integrate network of pedestrian and cycle pathways through the precinct and connecting to surrounding networks.
- Improve quality of visual prominence and access to tram/bus Super stops and improved identity for the creative business and education and knowledge corridor linking Deakin University and Tally Ho.
- Develop an infrastructure contribution strategy to support the upgrade and maintenance of enhanced streetscapes and public transport facilities.

STREETSCAPES AND INTERFACES

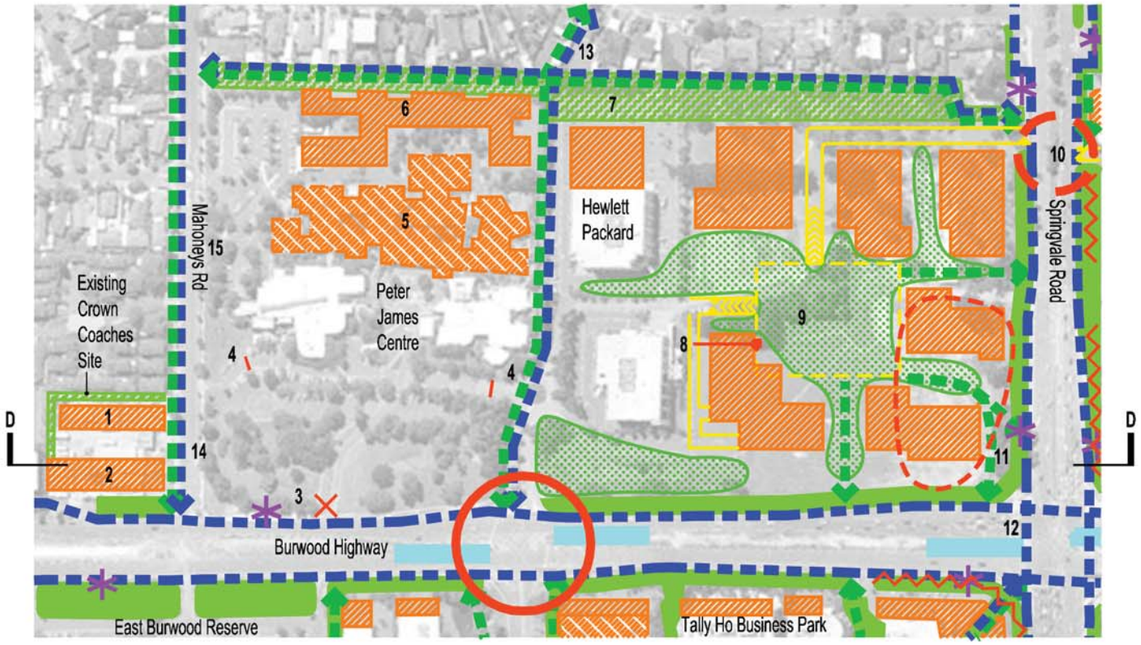
- Create high quality, generously scaled pedestrian environments characterised by more planting along streets and regular entry points to buildings and activity nodes.
- Create interesting and activated building interfaces with a particular emphasis on key intersections and public transport nodes to improve pedestrian safety through passive surveillance.

LAND USE & ZONING

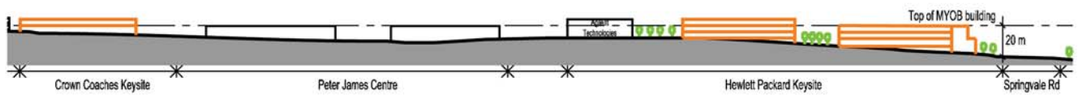
- Identify amendments to the planning scheme that might facilitate implementation of the vision and objectives of the Tally Ho UDF.
- Encourage developments that incorporate a mix of uses at ground level.

COMMUNITY

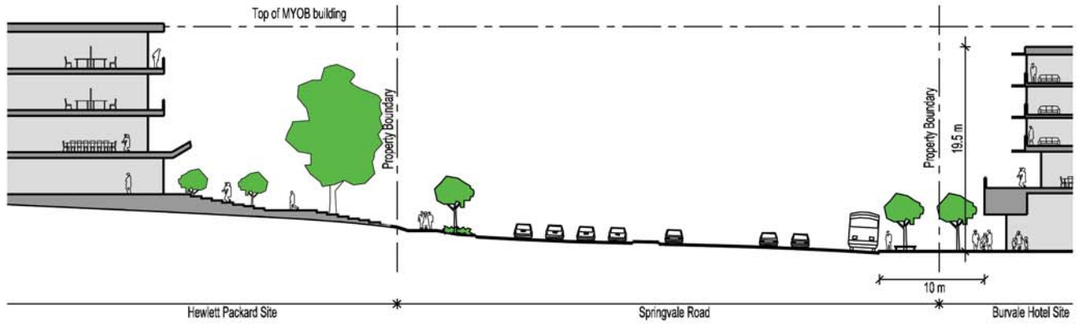
- Recognise the regional role of the Peter James Centre and its need to expand and adapt to meet changing community needs.



SITE PLAN



SECTION D-D: POTENTIAL BUILT FORM ELEVATIONAL PROFILE



SPRINGVALE ROAD INTERFACE

ACTIONS

1. Potential for commercial development at ground level with residential development above (3 storeys in total).
2. Potential for commercial development (3 storeys).
3. Southern entrance to Peter James Centre to be closed.
4. Boom gates to be installed to control public vehicular movement across Peter James Centre.
5. Capacity for additional level to existing buildings.
6. Potential for expansion of facilities (up to 2 storeys).
7. Widen buffer to residential area by relocating existing at-grade parking to new underground carpark.
8. Potential for privately-operated underground parking.
9. Potential for a central landscaped area above carpark.
10. Possible signalisation of intersection.
11. Articulate corner and reinforce intersection of Springvale Rd and Burwood Hwy with new built form. A maximum building height of 20 metres above ground level (measured from 113 metres AHD) is possible.
12. Improve pedestrian access to tram Superstop.
13. Potential to create link to residential street in the event that sites become available for purchase or redevelopment.
14. Consider extension of proposed bicycle lane southwards.
15. Future developments must produce Traffic Impact Assessments to allow assessment of traffic volume increases and patterns.

KEY

- Potential for future development
- Potential to increase height of building
- Strengthen existing landscaped areas to improve pedestrian and visual amenity
- Landscape buffer
- Potential for underground carpark
- Potential bike path
- Potential pedestrian path
- 75 Tram Superstop
- Bus Stops
  - Smart Bus Routes 888, 889 (Springvale Rd)
  - Bus Route 732 (Burwood Hwy)
- Active street frontage

0 25 50 75 100m

VOLUME 2: APPENDICES

APPENDIX 1: Traffic Engineering Assessment, Traffix Group (September 2006)

APPENDIX 2: Traffic Engineering Assessment – Supplementary Report, Traffix Group (September 2006)

APPENDIX 3: Tally Ho Urban Design Framework – Report of community consultation session feedback, IUM (December 2004)

APPENDIX 4: Community Feedback to the Exhibition Draft of the Urban Design Framework, City of Whitehorse (October 2006)

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Traffic Engineering Assessment

Tally Ho Urban Design Framework

Prepared for

Whitehorse City Council

September, 2006

6213R1830

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Traffic Engineering Assessment

Tally Ho Urban Design Framework

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TABLE OF CONTENTS

1 Introduction 1

2 Study Area 1

2.1 Existing Land Use 2

2.2 Existing Road Network 3

3 Car Parking Assessment 6

3.1 Existing Car Parking Supply 7

3.2 Car Parking Demand 8

3.3 Existing Floorspace 15

4 Parking Provision 15

4.1 Previous Land Use Surveys 15

4.1.1 Office 15

4.1.2 Warehouse 16

4.1.3 Restaurant 16

4.1.4 Summary of Parking Provision 16

4.2 Car Parking Rates 16

4.3 Parking Assessment 17

4.4 Predicted (Medium-term) Floor Area 17

4.5 Discussion of Parking Assessment 18

4.6 Recommended Parking Rates for Future Development 19

4.6.1 Restaurant 19

4.6.2 Shop 20

4.6.3 Overall Parking Requirements 20

5 Parking Reduction Measures 20

5.1 Pay Parking 20

5.2 Access Plans 21

6 Traffic Assessment 21

6.1 Ingress and Egress 21
6.1.1 AM Peak Commuter Period 21
6.1.2 PM Peak Commuter Period 22
6.2 Internal Road Network 23
6.3 Recommended Measures 24
6.3.1 Access 24
6.3.2 Internal Road Network 24
7 Future Development and Traffic Volumes 25
8 Recommended Access & Road Network 26
9 Conclusions 28

1 INTRODUCTION

Traffix Group has been engaged by MGS Architects on behalf of the Whitehorse City Council to undertake an access and parking assessment within the Tally Ho Business Park and surrounding area as per the confines of the project brief.

In particular, this assessment looks at the short to medium-term access and parking requirements within the Business Park and surrounding area and forms the basis for the traffic engineering aspects of the Urban Design Framework that has been prepared.

We note that our assessment commenced in November 2004 and a draft report was issued in January 2005. Current circumstances may have altered or materialised from the time of the assessment, and this is noted accordingly throughout this report.

2 STUDY AREA

The study area for the purpose of this assessment is bounded by Hawthorn Road, Springvale Road, Mullens Road, Consort Avenue, Burwood Highway, Highbury Road, the rear of Sheraton Close and Lincoln Street residential properties, Newhaven Road, the Melbourne Water Pipetrack Reserve, the southern boundary of Forest Hill College and Mahoneys Road as shown in Figure 1.

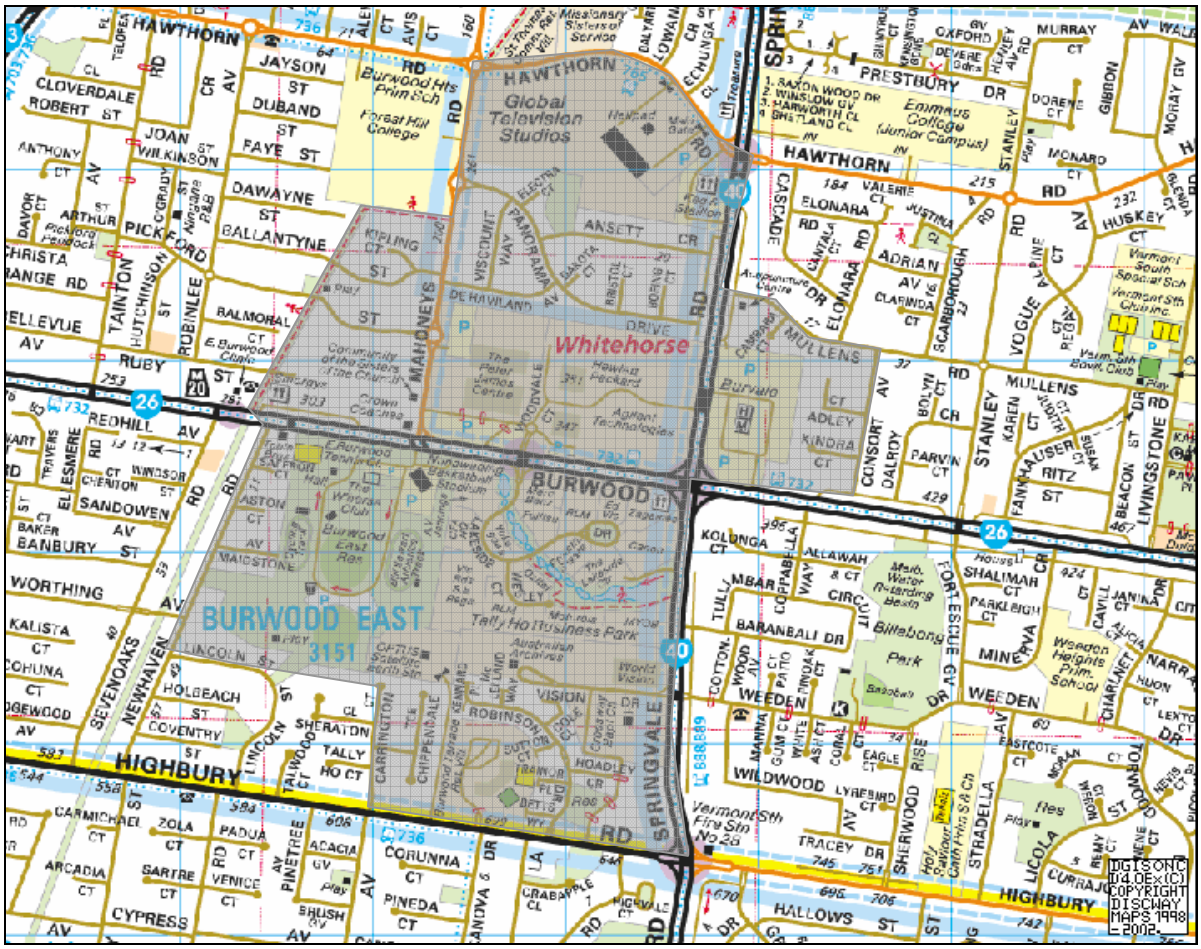

Figure 1: Study Area

Melbourne 2030[1] identifies the Tally Ho area as a Major Activity Centre. Tally Ho Business Park is recognised as a key site within the Activity Centre, with a primarily office/business function.

2.1 Existing Land Use

There are a number of land-uses within the study area, many of which are typical to an activity centre. These land-uses include:

- East Burwood Reserve comprising tennis club, basketball stadium, athletics track, cycling track, sports ovals, playground facilities and community hall facilities,
- Tally Ho Business Park mainly consisting of office buildings and some service facilities such as restaurants and banking facilities centered around a feature lake and passive recreational area,
- Major commercial and community premises located on Vision Drive including World Vision, Australian Archives and Crossway Baptist Church,
- The Burwood Terrace Retirement Village located on the north side of Highbury Road,
- The business park to the north of Burwood Highway (to be referred to as the Northern Business District) including the Peter James Centre, Hewlett Packard, Agilent Technologies and a vacant block of land,
- Crown Coaches located at the northwest corner of Mahoneys Road/Burwood Highway,
- The Burvale Hotel located on the northeast corner of Burwood Highway and Springvale Road,
- Global Television Studios located to the south of Hawthorn Road between Springvale Road and Mahoneys Road, and
- Residential premises primarily located between Global Television Studios and the Northern Business District, and east of Springvale Road.

Other land-uses include a restaurant premises located at the corner of Springvale Road and Hawthorn Road and a variety of mixed uses located on Burwood Highway between Mahoneys Road and the Melbourne Water pipetrack.

The various land use zonings defining specific regions are shown in Figure 2 below.

[1] State Government metropolitan strategy.

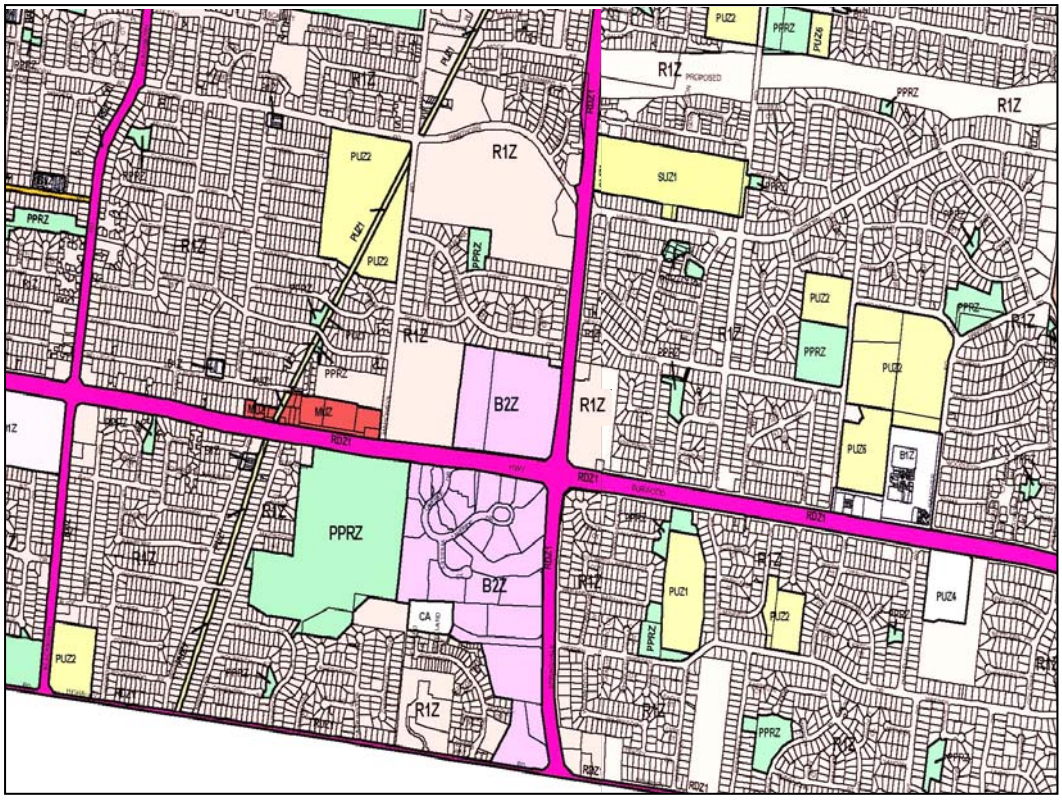

Figure 2: Land Use Zone Map

2.2 Existing Road Network

The central north-south and east-west running roads within the study area are arterial roads (i.e. Springvale Road and Burwood Highway are both under VicRoads jurisdiction) which carry the two-way daily traffic volumes and peak commuter hour volumes[2] shown in Table 1.

[2] Traffic Volumes are sourced from VicRoads SCRAM data dated September 2000. Volumes are rounded to the nearest 100.

Table 1: Arterial Network Traffic Volumes (September 2000)

Location	Average Daily Volume[1] (vpd)	Average AM Peak Hour Volume (vph)	Average PM Peak Hour Volume (vph)
Springvale Road (just south of Hawthorn Road)	63,000	4,700	5,000
Burwood Highway (just west of Lakeside Drive)	52,000	4,500	4,400
Springvale Road (just south of Burwood Highway)	53,700	3,600	4,100
Burwood Highway (just west of Springvale Road)	42,900	3,000	3,200
Note: (1)Traffic volumes are sourced from VicRoads SCRAM data and do not account for any vehicles performing left turns via the slip lanes.			

Springvale Road is one of the two major roads within the study area and is the only direct north south route within the study area. It provides a connection to the Eastern Freeway to the north and continues north to provide connectivity to the outer north-eastern suburbs such as Donvale and Doncaster East. Springvale Road also provides a connection to Monash Freeway and Princes Highway to the south and continues further to the south providing a connection to Mornington Peninsula Freeway. Springvale Road functions as one of the major orbital roads to the east of the Melbourne CAD.

Burwood Highway provides the major east-west route within the study area. Tram Route 75 commenced operation on Burwood Highway in late 2005. Burwood Highway provides connectivity to the Dandenong Ranges located to the east and Warrigal Road, Burwood to the west, where it changes name to Toorak Road and continues to the west providing connectivity to the Melbourne CAD.

The intersection of Springvale Road/Burwood Highway is signalised with left turn slip lanes and fully controlled right turn lanes provided on each leg of the intersection.

Springvale Road is also signalised at its intersections with Highbury Road and Hawthorn Road, while Burwood Highway is signalised with the intersection of Lakeside Drive and Woodvale Court and has a set of pedestrian signals located between the Melbourne Water pipetrack reserve and Sevenoaks Road, Burwood East.

Highbury Road is a primary arterial road along the southern boundary of the study area and changes to a collector road to the east of its Springvale Road intersection.

Hawthorn Road and Mahoneys Road are both collector roads within the study area. Mahoneys Road is treated with intersection traffic management measures i.e. roundabout controlled intersections at Pickford Street, Panorama Drive and Hawthorn Road.

The remaining streets within the study area are local or access streets providing access to respective residential, business and recreational areas.

Business Precinct

Based on the existing road network the Business Park can be considered to be made up of four regions as illustrated in Figure 3 below.

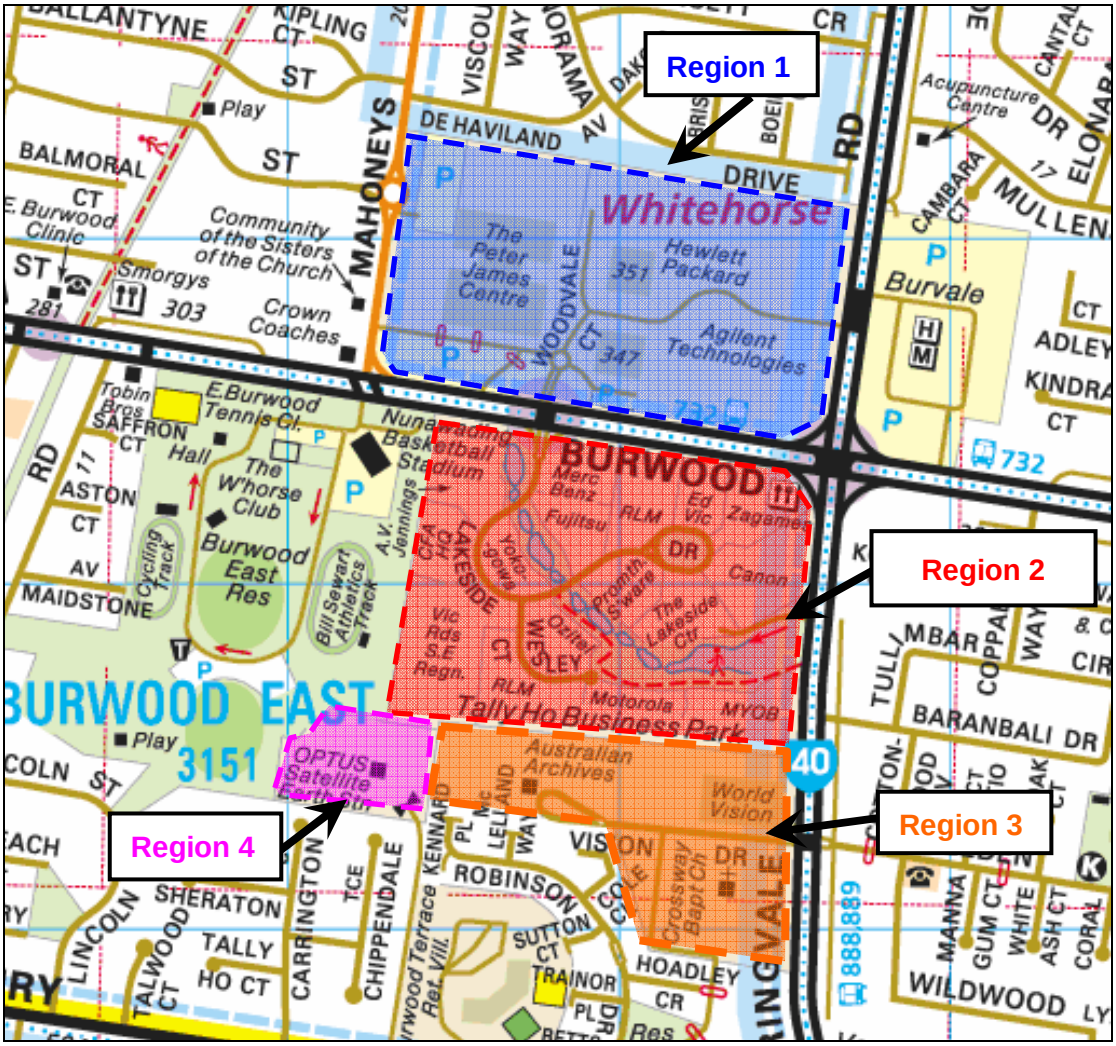

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Figure 3: Business Park Regions

Region 1 comprises a central north south running road named Woodvale Court that provides access from Burwood Highway to all existing business premises within the northern business district. Woodvale Court intersects with two east west running roads spaced approximately 60m apart. The most northern road provides access from Springvale Road and forms a T-intersection with Woodvale Court. The southern road provides access from Mahoneys Road and forms a cross intersection with Woodvale Court and continues to the east for a short distance providing internal access to 347 Burwood Highway. A roundabout controls this intersection and physically prohibits movements from the east and north to the west by means of a median island extending from the southern end of the roundabout. Access from Mahoneys Road to Springvale Road through the site is achievable using a route comprising all three of the aforementioned roads. Conversely, access from Springvale Road is not possible and westbound vehicles have to exit the region at the Woodvale Court/Burwood Highway intersection.

Additional access to car parking areas at the Peter James Centre is provided directly from the external network at two locations, namely Burwood Highway (left in access only) and Mahoneys Road (all movements).

Region 2 comprises two central roads named Lakeside Drive and Wesley Court both of which provide no through access. Lakeside Drive runs in a north south direction for approximately 200m and an east-west direction for approximately 260m and is accessed via Burwood Highway. At its eastern end Lakeside Drive terminates as a one way loop.

Wesley Court intersects with Lakeside Drive at its northern end and terminates as a court bowl at its eastern end forming an "L" shaped alignment.

Additional access to private properties is provided at two locations; namely, a left in/left out access point located approximately 100m to the west of the Springvale Road/Burwood Highway intersection provides access to Commonwealth Bank Australia (No.2/378 Burwood Highway) and Romanzo's (No.380 Burwood Highway) and a left in only entry point located 160m to the north of Vision Drive provides access to Motorola and MYOB (Nos. 10 and 12 Wesley Court respectively).

Region 3 contains a single access street named Vision Drive. Vision Drive runs in an east west direction spanning between Springvale Road and a court bowl located at its western end. A private access street that forms part of the Crossway Baptist Church site (No.2 Vision Drive) runs in a north south direction between Vision Drive and Highbury Road.

Region 4 encompasses the Optus Satellite Earth Station site. Access to the site is via a private road that runs in a generally north south direction between Highbury Road and the site itself.

3 CAR PARKING ASSESSMENT

The section of study area selected for the purposes of undertaking a car parking occupancy survey was confined to Region 2 within the Tally Ho Business Park as shown in Figure 4. This area is fully developed and generates a high demand for car parking, and is known to experience parking difficulties.

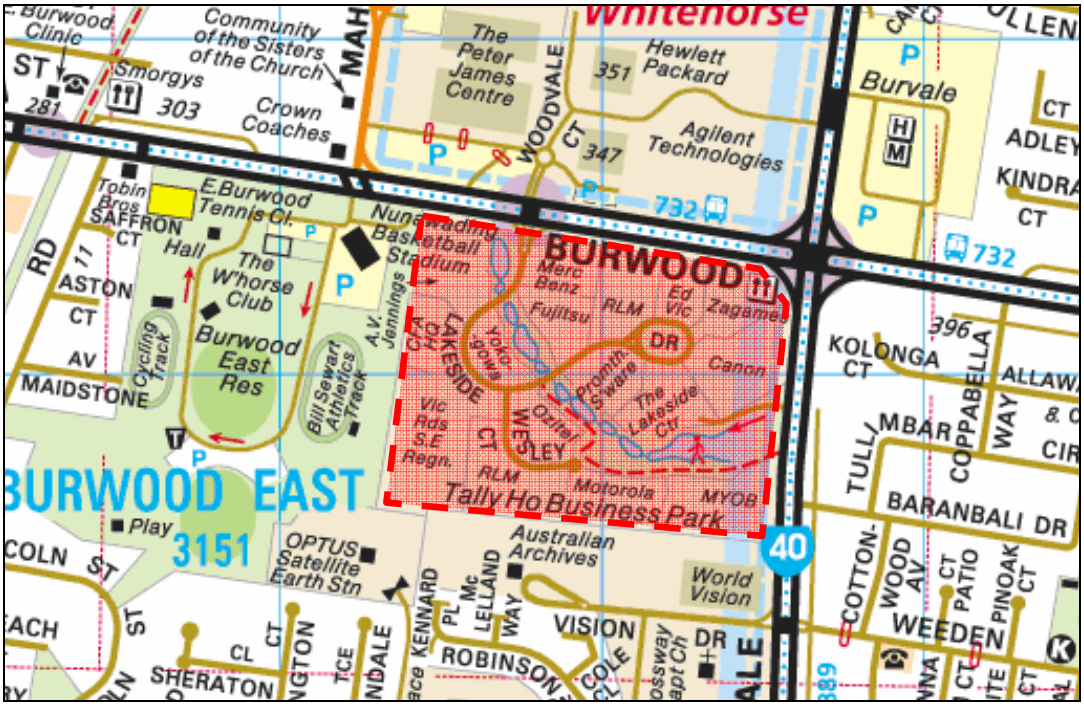

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Figure 4: Car Parking Occupancy Survey Area

The car parking occupancy survey was undertaken by Traffix Group on Tuesday 30th November 2004 at three intervals during the day, namely morning, lunchtime and afternoon to ascertain the existing parking supply, occupancy levels and availability for each period surveyed.

During the car parking occupancy survey one of the office tenancies at No. 24 Lakeside Drive, The Lakeside Centre, was unoccupied and No. 4 Wesley Court was subject to internal refurbishment with parking generated by the site only associated with contractors undertaking works.

We note that there have been no substantial changes to the Tally Ho Business Park since conduct of the above survey.

Additional spot car parking surveys were undertaken by Traffix Group in the car park areas located within Burwood East Reserve adjacent to the site in November 2004. Observations of parking demands were also undertaken in Vision Drive and the business park to the north of Burwood Highway.

A comparative analysis of the survey results was made with parking survey results obtained by Andrew O'Brien and Associates Pty Ltd in 1999 as part of the Tally Ho Business Park Parking Study.

3.1 Existing Car Parking Supply

On-street car parking is available along all of the streets within the Tally Ho Business Park. All business premises within the park also have on-site parking facilities, some of which are located in car parks common to a number of tenancies and specifically allocated to businesses while other businesses occupy exclusive lots and have private parking facilities. In addition, off-street parking facilities are located nearby within the East Burwood Reserve and are provided for reserve users.

The majority of the on-street spaces are unrestricted with only a small stretch on Lakeside Drive restricted to short-term parking. The majority of parking provided on-site is long-term with some businesses providing designated parking for visitors, loading and disabled motorist/passenger vehicles.

In total, approximately 2,145 on-site car spaces are located within the parking study area. Of these, approximately 210 car spaces are restricted for short-term or disabled users including spaces designated for loading purposes. Approximately 1,935 car spaces are available for long-term parking.

A further 81 spaces are available on-street within the survey area, with 71 spaces unrestricted and available for long-term use and 10 spaces restricted for short-term use.

Car Parking in the Vicinity

The car parking facilities located at East Burwood Reserve are provided for the users of the Reserve and comprise a mixture of unrestricted, restricted (three hour) parking spaces and exclusive use spaces i.e. staff and reserved spaces. In total, 605 formal spaces are available on site of which 322 spaces are suitable for long-term use and 268 are restricted to three hours. Additional spill over parking is also available partially around the perimeter of the football oval.

We have been advised by Council's Traffic Engineers that in the order of 500 permits are issued to Intergraph and CFA on an annual basis as part of a commercial agreement, which exempts permit holders from the three hour restrictions for specific areas within the car park; namely, spaces in the vicinity of the western boundary of the business park and spaces to the rear of the basketball stadium. Spaces for the basketball stadium, Whitehorse Club and tennis courts that run parallel to the site's Burwood Highway frontage are unavailable to permit holders.

3.2 Car Parking Demand

The results of the survey demonstrate that collectively the Tally Ho Business Park survey area has an on-site and on-street car parking occupancy in the order of 85%. However, this result assume that all car spaces within the survey area are publicly available and does not account for the overflow parking that occurs within the East Burwood Reserve car park or sites that were not occupied at the time of the survey. A detailed analysis of the results on a site by site basis identifies sites that had a surplus of car parking and those which were operating at or above capacity.

A summary of the key survey results for the on-street parking facilities and each site within the area is provided in Table 2 with full output of the results contained at Appendix A.

Table 2: Summary of Key Parking Occupancy Survey Results

Location[3]	Restriction	Capacity	Peak No. of Parked Cars Recorded	Comments
On-street Lakeside Drive and Wesley Court	Unrestricted	74	99	The level of on-street parking was well above capacity with illegal parking observed and vehicles restricting sight distance in some instances.
	2P (8am-6pm, Mon – Sat)	10	8	Observations indicated learner drivers regularly park in short-term spaces. Spaces are well utilised and subject to a high turnover.
1 Lakeside Drive Fujitsu, AMCOR,- Café Oggi, ECV, AVJennings, Coordimax and FAL	Unrestricted	179	166	8 vehicles were recorded to be parked in areas other than car parking spaces. Spare capacity was available within spaces designated for particular businesses.
9 Lakeside Drive Yokogawa	Unrestricted	34	15	Spaces within the secure underground car park were utilised at greater levels than ground level spaces. In the order of 55% of spaces were occupied.
23 Lakeside Drive RLM	Unrestricted	180	168	Only secure car park facilities on-site. Car park was consistently around 90% full.
29 Lakeside Drive DoET, KFC, CBA, Alstom and EMR	Unrestricted	38	36	Peak site occupancy for combined site was 95%. EMR and KFC were observed to have sufficient parking. 4 vehicles were observed to be parked on site in areas other than designated car spaces.

[3] Occupants listed for each site were current at the time of the car parking occupancy survey.

Location[3]	Restriction	Capacity	Peak No. of Parked Cars Recorded	Comments
380 Burwood Highway Romanzo's	Unrestricted	97	48	Peak occurred during lunchtime interval. 14 vehicles were parked during the morning interval and a proportion of these vehicles are likely to be from overflow parking of nearby sites.
33 Lakeside Drive (Ground level) Canon	Unrestricted	122	58	More than 50% of the ground level car park was unoccupied. An additional 57 spaces are contained in a basement car park. However, due to access restrictions, occupancy of this car park was not able to be determined.
24 Lakeside Drive (Lakeside Centre)	Unrestricted	93	54	Office tenancies were vacant at the time of survey.
	Visitor	6	6	Parking demand was observed to fluctuate indicating short-term utilisation.
20 Lakeside Drive Pronto Software	Unmarked	101	92	Surplus of 15 spaces on site during peak survey recording which incorporates 4 short-term spaces.
	Visitor	9	5	
	Reserved	8	6	
16 Lakeside Drive McConnell Dowell	Unmarked	110	80	Surplus of long-term parking in the order of 30 spaces. More than adequate parking available for visitors on site.
	Visitor	8	3	
12 Wesley Court (Ground level) MYOB	Unrestricted	124	125	Unrestricted parking demonstrated to reach capacity. Cars observed to be parked outside of linemarked bays. Short term facilities demonstrated to be at capacity.
	Couriers/ Visitors	25	24	
	Reserved	10	7	

Location[3]	Restriction	Capacity	Peak No. of Parked Cars Recorded	Comments
10 Wesley Court	Unrestricted	156	149	Unrestricted parking in the order of 95% of capacity.
Motorola	Visitor	3	2	Visitor parking appears appropriate for demand.
4 Wesley Court	Visitors	7	7	Visitor parking reached capacity.
RLM	Unrestricted	198(1)	-	Car parking demand within secure car park unable to be determined due to access restrictions. However, we understand that business was not in typical operation due to refurbishment works at the time of the survey.
12 Lakeside Drive	Fleet	75	72	Provision typically at capacity. Allocation of spaces appears to meet the various demands adequately.
VicRoads	Visitor	85	79	
	Unrestricted	162	160	
	Tester Vehicles	7	7	
	Heavy Vehicles	10	3	
8 Lake side Drive	Unrestricted	116	110	Visitor and unrestricted ground level spaces at capacity. Basement car park was observed to be almost at capacity.
CFA	Visitor	32	32	
	Reserved	3	2	
4 Lakeside Drive	Unrestricted	26	27	Car park considered to be operating at capacity.
CFA	Reserved	10	9	

Location[3]	Restriction	Capacity	Peak No. of Parked Cars Recorded	Comments
6 Lakeside Drive AVJennings	Reserved	44	41	Car park considered to be operating at capacity.
	Visitors	7	6	
	Disabled	2	0	
Note: (1): Car spaces on site established from Council record and unable to be verified on-site as access to car park was restricted.				

A spot car parking survey of the East Burwood Reserve car park on the same day as the Tally Ho Business Park survey indicated that 98 vehicles displaying permits were parked within the 3 hour restricted spaces at 2pm. An additional 50 unrestricted spaces were also occupied to the rear of the basketball stadium, which observations indicated were associated with Tally Ho staff.

The survey results indicate that the level of on-street parking is well above capacity and as a result vehicles are parking too close to intersections, on nature strips, on access aisles, within No Stopping zones and in some instances parking undesirably close to other vehicles and affecting the ease with which vehicles enter and leave the on-street kerbside parallel parking.

The results of the survey suggest that the following sites at the time of the survey were operating at or above their long-term parking capacity and were likely to be generating and contributing to the on-street parking demand or in some instances the parking demand recorded within the East Burwood Reserve car park:

- 12 Wesley Court,
- 10 Wesley Court,
- 12 Lakeside Drive,
- 8 Lakeside Drive,
- 6 Lakeside Drive,
- 1 Lakeside Drive, and
- 29 Lakeside Drive.

The results of the survey further suggest that the following sites at the time of the survey had adequate on-site parking facilities and adequate surplus of parking spaces such that it is unlikely that any long term off-site parking demand was generated by the site:

- 9 Lakeside Drive,
- 23 Lakeside Drive,
- 380 Burwood Highway,
- 5 Lakeside Drive,
- 20 Lakeside Drive,
- 33 Lakeside Drive, and
- 16 Lakeside Drive.

Of the above sites the following are identified as sites that could potentially lease car spaces to other businesses given that the surplus of on-site spaces demonstrated by the survey is of a considerable quantity:

- 380 Burwood Highway, Romanzo's (in the order of 45 surplus spaces during business hours),

- 33 Lakeside Drive, Canon (in the order of 60 surplus spaces), and
- 16 Lakeside Drive, McConnell Dowell (in the order of 30 spaces surplus).

Comparison to 1999 Parking Study

A parking study of the Tally Ho Business Park was conducted in 1999 by Andrew O'Brien and Associates Pty Ltd that assessed parking within the Business Park identified as Region 2 in Figure 2 of Section 2.2 of this report.

The following changes have been identified in the survey area since the study conducted by Andrew O' Brien and Associates in 1999 and the survey undertaken by staff of Traffix Group in November 2004:

- 9 Lakeside Drive constructed and occupied by Yokogawa,
- Operation of Fujitsu at 5 Lakeside Drive commenced,
- 10 Lakeside Drive developed and occupied by Motorola,
- 12 Lakeside Drive developed and occupied by MYOB,
- Occupancy of 29 Lakeside Drive/378 Burwood Highway has changed,
- 24 Lakeside Drive developed into the Lakeside Business Centre and leased as various tenancies,
- Occupancy at a number of the tenancies at 1 Lakeside Drive has changed,
- 20 Lakeside Drive is now occupied by Pronto Software, and
- The supply of on-street parking in Wesley Court has been reduced as a result of the construction of crossovers.

The Andrew O'Brien study found that the on-street parking demand in Wesley Court was high with over 90% of the 53 on-street spaces used for most of the day. It is noted that vehicles were parked in 90^{o} configurations at the end of the court bowl during the survey.

The 20 short-term space capacity on Lakeside Drive was recorded to have a peak parking occupancy of 100% and a long term on-street demand of 46 spaces was recorded for Lakeside Drive. The results of the Traffix Group survey indicate that the demand for on-street parking has significantly increased since the earlier survey and the level of on-street parking is above capacity.

An on-site estimated parking shortfall was established for each site as part of the earlier Andrew O'Brien study and a collective shortage determined for the area in the order of 375 spaces. This forecast shortfall was generally based on a parking demand of 0.85 spaces per employee which incorporated parking for visitors. As discussed in the following sections, had all premises within the survey area been occupied during the survey an overflow parking demand of around the same magnitude would have been expected i.e. approximately 150 space demand in the East Burwood Reserve, 150 space demand potentially generated by No.4 Wesley Court and approximately 25 vehicles parked on-street above the actual capacity.

3.3 Existing Floorspace

We have been informed by the Whitehorse City Council that approximately 70,700m^2 of floor area is currently provided within the survey area (Region 2) as summarised in Table 3.

Table 3: Summary of Existing Floor Space(1)

Use	Floor Area (m^2) *
Office	50,600
Office (Unoccupied)	10,400
Warehouse	8,400
Restaurant	1,300
TOTAL	**70,700**
Note: * Floor Area rounded to nearest 100.	
(1) Floor space obtained from Council in November 2004	

4 PARKING PROVISION

In order to undertake a review of the parking provision in the Business Park, it is necessary to make an assessment of parking demand and compare this to the existing parking supply.

The existing parking supply has been determined by Council records, field inspections and perusal of appropriate aerial photographs of the Business Park. The theoretical parking demand is determined from actual parking observations and historical data that we have collected, and rates other sources report for various land uses.

4.1 Previous Land Use Surveys

We have undertaken numerous car parking assessments of the main uses which are located within the business park and provide an assessment of appropriate provision rates below.

4.1.1 Office

Our experience suggests that the provision of less than the 3.5 car spaces/100 m^2 of office floor area as set out in the Planning Scheme can rarely be justified in outer suburban areas. In fact, parking demand at rates in excess of the Planning Scheme requirement can readily be found.

We are therefore of the opinion that the rate of 3.5 car spaces/100 m^2 should not be reduced and is an appropriate provision rate for offices in the Business Park.

It is also noted that offices are low intensity uses during the evening and weekend periods which means that these spaces would be available for use as overflow parking by high intensity uses during these periods (i.e. restaurants, etc).

4.1.2 Warehouse

Our experience suggests that provision of 1.5 car spaces/100 m^2 of warehouse floor area as set out in the Planning Scheme is generally appropriate.

We are therefore of the opinion that the rate of 1.5 car spaces/100 m^2 should not be reduced and is an appropriate provision rate for any warehouse floor area in the Business Park.

4.1.3 Restaurant

We believe that a car parking rate of around 0.3 spaces/seat during the evening is an appropriate provision rate for restaurants within the Business Park based on surveys we have conducted at similar facilities.

Our experience further suggests that a car parking rate of 0.15 spaces/seat at lunchtime is generally adequate and we consider that this daytime rate is particularly expected within the Business Park because we realise that the "office" worker population within the region is likely to walk. Also this reduced rate applies as a result of lesser seats typically being occupied during the daytime.

We are therefore of the opinion that the rate of 0.3 car spaces/seat is an appropriate provision rate for any restaurant in the Business Park unless a reduced rate of 0.15 spaces/seat can be justified as a result of suitable public spaces being available during the evening.

4.1.4 Summary of Parking Provision

The parking rates identified above have been established from various surveys that we have undertaken, are consistent with surveys undertaken by other traffic engineering consultants, and are generally accepted throughout the industry.

4.2 Car Parking Rates

Table 4 summarises these rates and includes an assessment of the proportion of each car parking rate, which relates to long-term parking and short-term parking.

Long-term parking has been defined as all parking that is available to the public for longer than three hours (i.e. typically provided for staff). Short-term parking is therefore all parking that is available to the public for no more than three hours and is typically provided for visitors and customers.

Table 4: Car Parking Rates Based on Surveys Elsewhere

Use	Measure	Daytime Rate	Proportion (%)	
			Long-term	Short-term
Warehouse	100 m^2	1.5	90	10
Office	100 m^2	3.5	90	10
Restaurant	Seat	0.15	30	70

4.3 Parking Assessment

Table 5 sets out an assessment of car parking demand for the Business Park in relation to supply and the theoretical peak demand at the time that the parking survey was conducted by Traffix Group. Also provided in Table 5 is a summary of the actual parking demand in the Business Centre as recorded between 10:15am and 11:30am during the survey held on Tuesday 30th November 2004.

We note that No. 4 Wesley Court has not been included as part of the theoretical demand assessment presented below as the site was not typically operating.

Table 5: Overall Parking Comparison (Premises Occupied at Time of Survey)

Type of Parking	Existing Supply			Existing Theoretical Demand (Land Use)	Observed Parking On & Off Street (Spaces Occupied)
	On-street	Off-street	Total		
Short-term	10	180	190	225	157
Long-term	74	1,756	1,830	1,722	1,687(1)
Other	0	16	16	NA	2
Total	**84**	**1,952**	**2,036**	**1,947**	**1,846**
Note:	(1) Parking demand recorded in East Burwood Reserve during morning period is assumed to be the same as afternoon (2pm) demand.				

4.4 Predicted (Medium-term) Floor Area

The predicted medium term total floor space in the Business Park is not expected to increase. However, occupancy of the floor area is expected to increase with 4 Lakeside Drive not operating at capacity (i.e. undergoing retro fitting works) and a tenancy vacant within the Lakeside Business Centre at the time the survey was conducted by Traffix Group.

Table 6 provides a summary of the breakdown of the predicted additional floor area that will be occupied within the survey area in the medium term in the relevant land use categories as presented in Table 1.

Table 6: Summary of Future Floor Space (All Premises Fully Occupied)

Use	Floor Area (m^2)*
Office (No.4 Wesley Drive)	10,300
Office (Tenancy No. 24 Lakeside Drive)	100
TOTAL	**10,400**
Note: * Floor Area rounded to nearest $100m^2$.	

Council records indicate that 205 spaces are supplied on site at No. 4 Wesley Court which suggests that a car parking shortfall in the order of 150 spaces is associated with the site (i.e. 3.5 spaces/$100m^2$) and will need to be accommodated off site when business operations resume from the site.

Table 7 presents the theoretical parking demand for Region 2 in relation to the existing supply of on-site parking within the Business Park based on the total floor space of all buildings i.e. assuming 100% occupancy in the future.

Table 7: Overall Future (Medium-term) Parking Comparison

Type of parking	Existing Supply			Existing Theoretical Demand (Land Use)
	On-Street	Off-Street	Total	
Short-term	10	187	197	226
Long-term	74	1,955	2,029	2,035
Other	0	16	16	NA
Total	**81**	**2,158**	**2,242**	**2,261**

4.5 Discussion of Parking Assessment

The car parking survey results discussed in Section 3.2 for Region 2 of the Business Park demonstrate that there are a number of sites within Region 2 that are operating at or above the on-site car parking capacity, suggesting a deficiency of long term on-site parking. The level of parking on street is demonstrated to be above capacity and the occurrence of parking within the adjacent East Burwood Reserve car park confirms that a number of businesses have a car parking deficiency.

We note that during the time of the survey, No. 4 Wesley Court was subject to refurbishment works and was not operating at capacity. The on-street parking demand recorded by the survey therefore does not account for any additional off-site demand generated by No. 4 Wesley Court when normal business operations are in place. An additional requirement for up to 150 spaces is expected (in the order of 125 long-term and 30 short term spaces).

We further understand that at the time of the survey MYOB intended to increase the number of staff based at their Wesley Court site to the tune of 80 employees (at an additional parking demand of 68 spaces ie. 0.85 spaces x 80 employees) and that discussions between MYOB, World Vision, Crossways and Council Officers had been held regarding the possibility of MYOB leasing car spaces from Crossways and creating a link between MYOB and World Vision. We understand that such arrangements have since been pursued and a permit issued for the development of a 282 space car park at 27-29 Vision Drive. An arrangement of this nature between MYOB and Crossways achieves efficient use of available parking resources within the area as each use has demands that peak at different times.

On-Street Car Parking

The car parking assessment in Table 5 demonstrates that within Region 2 there is a deficiency of short term parking in the order of 30 spaces. However, the actual demand is expected to be greater as the majority of short-term spaces are not publicly available. A number of sites have provisions for short term parking on site, however, the introduction of consolidated short-term restrictions on street would efficiently serve a number of businesses. The provision of short-term parking opportunities within the park is likely to become more crucial in the medium-term when all sites are operating at capacity and the off-site demand increases.

We recommend that short term parking restrictions be installed on one side of the road network. Further, the introduction of No Stopping restrictions to improve sight lines within

the Business Park and improve access for the Region as discussed further in Section 5.3 is recommended. Displacement of long-term on-street car parking can be expected as a result.

Long Term Off-Street Car Parking

The desire for MYOB to explore options to increase car parking suggests that businesses within the region may be willing to address parking problems if given appropriate means. The Andrew O'Brien Parking Study conducted in 1999 recommended that the construction of a multi-deck car park be explored on one of the then vacant blocks.

The opportunity to construct a multi deck car park within Region 2 itself is very limited with all sites now developed. However, the construction of a multi-deck car park on the site currently occupied by VicRoads is seen as a potential option that would most likely only be viable under a "user pays" system.

A further site considered suitable for development of a "user pays" car park is the vacant block of land on Vision Drive (No. 27-29 Vision Drive), particularly given that a permit has been issued for the development of an at-grade car park on the site that is to establish vehicular and pedestrian links to the business park. Development of a multi-deck car park on this site would require a collaborative approach with existing businesses in Region 2.

We have been advised that a multi-deck commercial car park for public use may be constructed on the vacant land on the north-west corner of Springvale Road and Burwood Highway within Region 1. This car park would provide suitable parking for Region 1. However, it is not considered to be suitable for employees of Region 2 under current conditions. An innovative solution such as the operation of a shuttle bus service between the two regions during commuter peak periods is seen to be required to make this an attractive option for Region 2 employees.

We recommend that within the short to medium term options to account for the parking shortfall include businesses leasing spaces from other sites that have a significant surplus of spaces as identified in Section 3.2.

4.6 Recommended Parking Rates for Future Development

This section provides a summary of the parking rates which we feel are appropriate for future uses within the study area which have not been discussed as part of Section 4.1. Also provided is a comparison of the parking rates that are set out in the Planning Scheme for the relevant uses.

4.6.1 Restaurant

We have undertaken a number of car parking surveys at various restaurants throughout metropolitan Melbourne which suggest that the statutory car parking requirement for 0.6 car spaces/seat available to the public is excessive.

In particular, our surveys show that a car parking rate of around 0.3 spaces/seat during the evening would generally be adequate and is similar to various local policies.

A car parking rate of 0.15 spaces/seat at lunchtime is generally adequate and we consider that this daytime rate is particularly expected within the Business Park because we realise that the "office" worker population within the Region is likely to walk. Also, this reduced rate as a result of lesser seats typically being occupied during the daytime.

We recommended that an appropriate rate for restaurants in the Business Park is 0.3 spaces/seat at evening and 0.15 spaces/seat at lunchtime.

The lunchtime restaurant rate is also considered to be satisfactory for lunchtime café uses and we note that cafes typically don't generate any parking during the evening (depending on operating hours).

We also note that the nature of the Business Park is such that there is likely to be a lower overall demand for parking during evening periods when offices typically generate a low demand for parking. Accordingly, we believe that the provision of on-site parking at a rate of 0.15 spaces/seat (i.e. the likely daytime demand) may be an appropriate provision for restaurants.

4.6.2 Shop

It is noted that the Planning Scheme does not make any reference to the type of shop in relation to the statutory car parking requirement. It is our experience that the rate of 8 parking spaces per 100m^2 of floor area is only observed in very small shops such as corner stores at busy times or community markets.

Any shop established within a Business Park is likely to provide for the service requirements of the "officer" population and would tend to generate parking at a reduced rate. While not specifically defined in the Planning Scheme, these shops are commonly referred to as 'specialty shops' and an upper provision rate of 4.5 spaces/100m^2 has been observed at specialty shops which have generally been difficult to access without a car and are not located nearby to other facilities.

We are satisfied that the provision of 4 spaces/100m^2 is an appropriate rate for a specialty shop within the Business Park.

4.6.3 Overall Parking Requirements

A summary of the recommended parking rates is presented in Table 8. These parking rates are compared against the Planning Scheme rates which are found in Clause 52.06.

Table 8: Summary of Appropriate Parking Rates

Use	Measure	Parking Rate		
		Planning Scheme	Relevant Clause	Recommended
Office	100 m^2	3.5	52.06	3.5
Warehouse	100 m^2	1.5	52.06	1.5
Restaurant/Cafe	seat	0.6	52.06	0.3*
Shop (ordinary)	100 m^2	8	52.06	4

Note:- * A lesser rate of 0.15 spaces/seat may be acceptable if it can be shown that the overflow evening and weekend parking demand can be met by unoccupied publicly provided spaces nearby to the facility.

5 PARKING REDUCTION MEASURES

5.1 Pay Parking

The area consists of a number of uses, most of which have provided sufficient on-site parking. There is little opportunity for long-term parking to be shared. However, short-term parking is a resource that can be provided on-street and shared by businesses, as discussed in Section 4.5.

On-street long-term parking that is utilised for overflow parking by sites that have insufficient provisions should be converted to pay parking. Council should consider the introduction of pay parking at the time of commencement of the tram services past the Business Parks Burwood Highway frontage as accessibility to the site improves[4]. This approach is in line with the current State Government philosophy to create a change in travel mode patterns and increase the use of public transport.

The East Burwood Reserve is a community resource and any parking associated with businesses or organisations should continue to be undertaken at a fee, until such time as the current arrangement is reviewed by Whitehorse City Council, as it is generally inappropriate for ratepayers to subsidise car parking for businesses/organisations.

5.2 Access Plans

A reduction in car parking and travel demand can be achieved via encouragement and facilitation of modes other than motor vehicle and/or efficient use of motor vehicles i.e. car pooling. Access Plans are implementation plans that aim to increase accessibility to sites by means other than motor vehicle by facilitating and encouraging use of sustainable transport and minimising the need to travel.

Access Plans for workplaces can include a range of measures, for example, the provision of lockers and bicycle parking facilities, the development of car pooling schemes and the provision of public transport information.

We recommend that any new development or use within the Business Park should develop and implement an Access Plan. Council should consider the requirement for Access Plans for any new uses that reside within the Business Park.

6 TRAFFIC ASSESSMENT

A number of observations of the study area were undertaken by Traffix Group to assess traffic patterns, circulation and identify congestion and access issues. In particular, the intersection of Lakeside Drive/Burwood Highway/Woodvale Court was observed.

6.1 Ingress and Egress

6.1.1 AM Peak Commuter Period

Observations indicated that access to Regions 1 and 2 was concentrated during the 8-9am peak commuter period. During the AM peak period vehicular traffic accessing Region 2 is dispersed among three access points, with Lakeside Drive functioning as the primary access point. Traffic distributed at the other two access points for Region 2 was observed to include “through” traffic travelling through the site to gain access to the internal road network and “access” traffic generated by the site itself.

The two right turn lanes on Burwood Highway providing access to Lakeside Drive adequately accommodate the demand for right turning vehicles. The allocated green time for the right run phase was also observed to be adequate with typically all vehicles

[4] We note that tram route 75 commenced operation on Burwood Highway through the study area in late 2005.

queued within the right turn storage lane able to complete the right turn movement in one phase.

It was further observed that vehicles legally parked on Lakeside Drive to the south of the driveway for No. 1 Lakeside Drive impede effective merging of the two lanes on the departure side of the Burwood Highway/Lakeside Drive intersection into one lane. Inefficiencies in the traffic flow just downstream of the intersection can cause queues to form spanning back to within the Burwood Highway/Lakeside Drive intersection. The capacity of the intersection is expected to be reduced as a result.

The right turn lane provided for turning movements from Burwood Highway to Woodvale Court was underutilised with a queue length of three or less vehicles typically formed. Storage for additional vehicles is available within the right turn lane for Woodvale Court. Vehicles turning left from Burwood Highway to Woodvale Court do so under virtually free flow conditions given that the demand for right turn and through movements from the south and west leg of the intersection are minimal.

Access to No. 351 (Hewlett Packard) and No. 347 (Agilent Technologies) Burwood Highway is primarily gained from Springvale Road. Access to the Peter James Centre is primarily gained from Mahoneys Road.

6.1.2 PM Peak Commuter Period

The PM peak (5 to 6pm) is the critical period for Region 2 with egress from the region provided only at the northern boundary of the park to Burwood Highway. The Lakeside Drive intersection is the primary and only public egress point while a secondary egress point located at the northern boundary of No.380 Burwood Highway (Romanzo's) technically provides egress from private property only.

All traffic generated by businesses within Region 2 is required to access the external network via the Lakeside Drive/Burwood Highway intersection. Observations indicated that queues on Lakeside Drive on the approach to the intersection spanned back to a point just to the west of Wesley Court reaching a length of approximately 250m. The southern approach of the intersection (Lakeside Drive) is operating above capacity.

In instances where the queue formation extends past a site's driveway, vehicles exiting can experience delays and difficulty as a result. Vehicles turning left onto Burwood Highway from Lakeside Drive are impeded by the queue of right turning vehicles.

Traffic generated from Region 1 was observed to form queue lengths of approximately 15m on the northern approach to the Woodvale Court/Burwood Highway/Lakeside Drive intersection with typically two vehicles queued in one lane. On average three to five vehicles were observed to perform a right turn in any one green time cycle.

We note that uncontrolled right turn movements from Woodvale Court into Burwood Highway occur during the same cycle as uncontrolled right turn movements from Lakeside Drive. While the intersection technically operates under filter conditions the minor amount of north south traffic movements, i.e. between Lakeside Drive and Woodvale Court means that the predominant movement is right turns from Lakeside Drive. The filter signal operation and patterns of traffic movement at the intersection is considered to have the potential to confuse some motorists.

6.2 Internal Road Network

The road network within Region 2 provides sufficient circulation within the site via a one way loop arrangement at the eastern end of Lakeside Drive and a court bowl located at the eastern end of Wesley Court, providing for turning movements.

The curvilinear alignment of Lakeside Drive and Wesley Court was designed to primarily be a trafficable access street which could accommodate large vehicles. The carriageway width of the network is typically wide enough to accommodate a through lane in each direction and a turning vehicle or parked vehicle. During business hours the network generally consists of an on-street kerbside parallel parking lane and a trafficable lane in each direction of travel (including the Lakeside Drive one way loop road). The exception to this arrangement is on the curved section of road running adjacent to the frontage of No. 9 Lakeside Drive where No Stopping parking restrictions apply on the eastern side of Lakeside Drive.

The presence of parked vehicles on both sides of the road restricts sight distance of oncoming vehicles and vehicles propped to perform a turn, particularly in sections of road where the radius creates a curved alignment. The concentration and extent of parked vehicles also restricts sight distance from a number of individual property driveways. We appreciate that sight distance from private property driveways in many instances is less than ideal due to the presence of vehicles parked on street. However, we note that the sites listed in Table 9 where identified as having poor visibility and could benefit from any increase in sight distance that could be achieved by removal or formalisation of parked vehicles (i.e. hockeystick delineation).

Table 9: Region 2 Potential Access Improvements

Site	Access Road	Driveway Location
16 Lakeside Drive, McConnell Dowell	Wesley Court	West boundary of site
9 Lakeside Drive, Yokogawa	Lakeside Drive	Northern boundary of site
		Southeast corner of site
1 Lakeside Drive, Fujitsu/Amcor	Lakeside Drive	Southeast corner of site
20 Lakeside Drive, Pronto Software	Lakeside Drive	Northwest corner of site

The curvature and superelevation of Lakeside Drive in combination with on-street parking and the level of activity in the area create a necessity for a relatively low speed environment in order to safely manage the area.

The intersection of Wesley Court/Lakeside Drive is wide and conducive to vehicles entering and exiting the court at unrestrained speeds. During the peak arrival period in the morning this is particularly evident with vehicles entering the court severely “cutting the corner”, which is considered in this case to be an unsafe practice.

The level of activity in the area and site ingress and egress suggests that Lakeside Drive may be a suitable candidate for the implementation of some measures to calm traffic and promote a safer environment.

6.3 Recommended Measures

6.3.1 Access

The existing vehicle load on the Lakeside Drive/Burwood Highway intersection during the PM peak means that the intersection is operating above capacity and the internal network is strained as a result i.e. excessive queue lengths internal to the Tally Ho Business Park as discussed in Section 6.1.2. Comparatively, the intersection operates satisfactorily during the AM peak when the vehicle volume generated to the park arrives at a number of access points.

Consideration should be given to the establishment of additional "formal" egress points to decrease the volume of traffic exiting the area via the Lakeside Drive/Burwood Highway intersection. While little opportunity exists to create an alternate egress point on common or publicly available land (i.e. managed by the body corporate) alternate egress arrangements from specific private property could be considered. The following site is identified as potentially being suitable for the introduction of private access arrangements as detailed in Table 10.

Table 10: Potential Private Access Arrangements

Site	Potential Location	Access Arrangement	Comments
No.12 Wesley Court (MYOB)	Eastern boundary	Left out only arrangement providing access to Springvale Road.	Potential catchment area of around 500 spaces located on No. 10 and No. 12 Wesley Court.

Extension of the existing left turn slip lane on the south approach in Lakeside Drive is likely to increase the capacity of the intersection and reduce queue lengths and could be considered as an alternative option to improve access from Region 2.

The introduction of a parking prohibition on Lakeside Drive on the approach to the Lakeside Drive/Burwood Highway intersection is recommended to improve the operation of the intersection and reduce queuing. A prohibition that operates in a similar manner to a clearway, i.e. on the west side during the PM peak and on the east side during the AM peak, would be suitable.

6.3.2 Internal Road Network

The traffic conditions internal to Tally Ho Business Park could be improved by applying traffic calming measures. The nature of the Business Park requires trucks to access the area and as such any traffic calming measure would need to be suitable for large vehicles

The installation of No Stopping restrictions on the inner radius side of the curved section of road in Wesley Court would improve vehicular inter-visibility (similar to the existing No Stopping restrictions on Lakeside Drive) and is recommended. Figure 5 illustrates the recommended measures for Region 2.

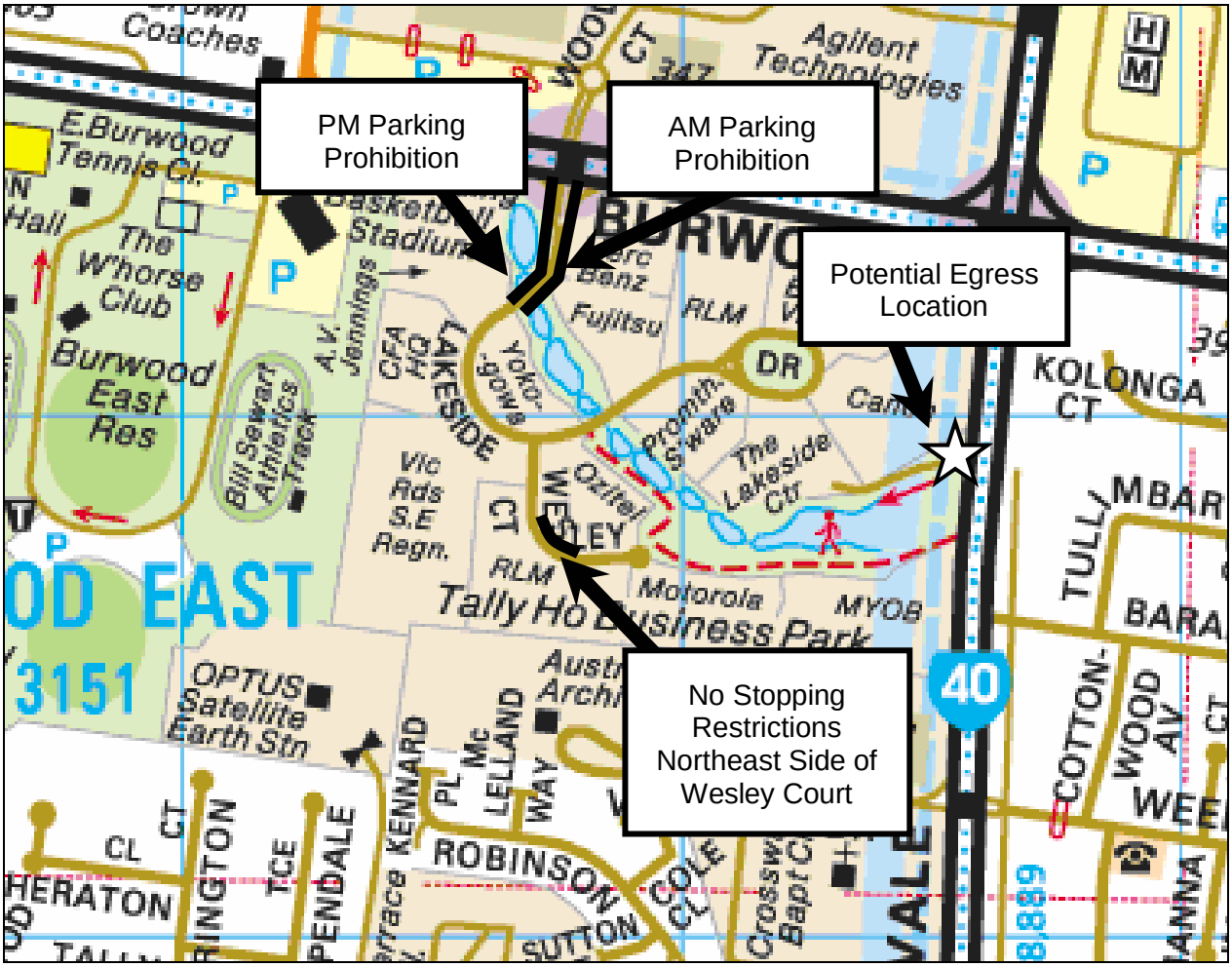

Figure 5: Region 2 Recommended Measures

7 FUTURE DEVELOPMENT AND TRAFFIC VOLUMES

In early 2005 Council estimates indicated that the vacant land located to the east of Hewlett Packard and Agilent Technologies in Region 1 could ultimately accommodate in the order of 30,000m^2 of office floor area and in the order of 1,200 employees at a density rate of 4 employees per 100m^2. The predicted floor area is expected to generate approximately 3,000 to 4,500 additional vehicle trip ends per day assuming a lower limit car driver mode split in the order of 55% and upper limit car driver mode split of 85%. Of these, around 20% (or around 600 to 900 vehicle trip ends) will be generated during each peak hour.

When compared to the existing traffic generated by the developments at 347 and 351 Burwood Highway, which is in the order of 1,650 vehicle trip ends per day and around 330 vehicle trip ends in each peak hour, the overall increase in traffic for the region is significant (up to 270% increase in traffic volume).

While a detailed assessment of any future development would be the subject of a separate study, Section 8 seeks to identify an internal network and access arrangements which will provide for future traffic volumes.

8 RECOMMENDED ACCESS & ROAD NETWORK

The increased traffic demands are likely to substantially compromise the operation of the intersection of the east-west access road (currently spanning between Springvale Road and Woodvale Court) and Springvale Road that currently allows right turns to be performed into and out of the site by an opening in the dividing median. While it is recommended that a traffic study analysing the impact of any proposed development on the vacant land at the corner of Springvale Road and Burwood Highway be undertaken by consultants at the appropriate time, ultimate development of the land will require an upgrade to the existing access arrangement on Springvale Road. We believe that the most appropriate access arrangement is likely to be a signalised intersection at Springvale Road.

Given the proximity of the Springvale Road/Burwood Highway intersection to the existing access point on Springvale Road (in the order of 150m apart) we do not consider the existing access point to be an ideal location for signals. The operation of a signalised access point 50m or more further to the north is likely to be an improvement over signalisation at the existing location and would provide spacing between signals that is generally accepted on primary arterial roads i.e. 200m.

The large expanse of underutilised car parking that currently exists on the site at 385 Burwood Highway as part of the Burvale Hotel suggests that the site could be potentially partially redeveloped or even fully developed. Increased use of the existing site would be expected to generate additional traffic, which would potentially also benefit from a signalised intersection.

Part of this assessment concluded that the Lakeside Drive/Woodvale Court/Burwood Highway intersection is operating above capacity. In particular, the southern and eastern legs operate above capacity during the PM peak. Given that the intersection currently operates above capacity we believe that it is best to consider the establishment of an additional access arrangement at Burwood Highway, restricted to left movements out only.

We have been advised by VicRoads that no intersection analysis was conducted as part of the Tram Route 75 Extension project and that the reduction in capacity of the intersection has not been forecast. The establishment of a left out only access arrangement at Burwood Highway will allow the spare capacity that the northern leg of the intersection (Woodvale Court) has following the extension of Tram Route 75 to be primarily used for accommodation of additional right turn movements.

Currently the right turn movements from the north and south approaches of the intersection are allocated to the same phase and occur as uncontrolled movements. An increase in traffic from Region 1 may require the phasing to be reviewed and could further alter the operation and capacity of the intersection.

Figure 6 illustrates the recommended access arrangements for Region 1 and provides a guideline for the alignment of the internal network assuming ultimate development of the region. The type of development, proposed lot size, orientation etc will ultimately govern the requirement for circulation within the region, the level of connectivity between sites and the internal road network and any requirement for internal traffic management i.e. roundabout controls.

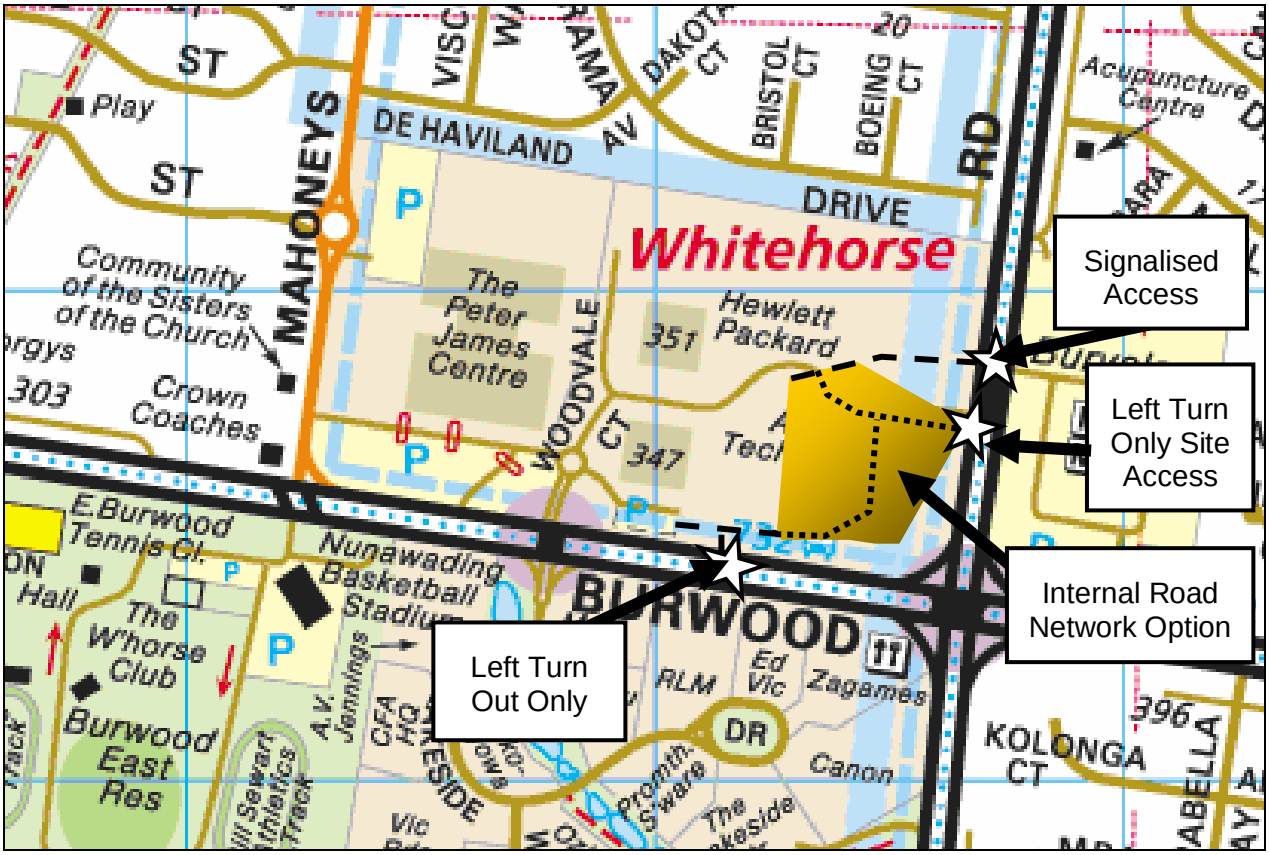

Figure 6: Recommended Road Network and Access Arrangements

We are confident that the potential roads and access points shown in Figure 6 will be able to adequately cater for the future traffic volumes following ultimate development of Region 1, assuming that an appropriate new intersection arrangement be provided on Springvale Road.

The shaded area in Figure 6 illustrates an option for an extended internal road network that provides connectivity within the region itself and utilises the existing left turn deceleration lane on Springvale Road. The aforementioned factors, i.e. lot size and orientation, will determine the requirement for internal connectivity within the site itself and the area within the shaded region is considered to be extremely flexible.

The existing median opening on Springvale Road could still be made available for vehicles travelling south to perform U-turns to travel north and for vehicles travelling north to perform a right turn into the Burvale Hotel site. The existing operation of the median in relation to the Burvale Hotel site should be reviewed as part of any future development of the site.

As a result of the potential signals on Springvale Road as discussed above, we believe that the existing uncontrolled movements at the current Springvale Road access to Region 1 should be reviewed.

9 CONCLUSIONS

Having undertaken an assessment of access and parking within the Tally Ho Business Park and surrounding area, Traffix Group concludes that:

a) A number of business within Region 2 of the Business Park currently have a deficiency of long-term on-site parking,

b) There is a deficiency of publicly available short-term parking within Region 2 and the introduction of consolidated short-term parking on street will gain efficiencies,

c) On-street long-term parking within Region 2 should be pay parking and implementation should be considered following the commencement of the extended Tram Route 75 (which occurred in late 2005),

d) Car parking for new developments (or redevelopments) within the Business Park should be provided as recommended in Table 6 of this report (any parking deficiencies associated with any existing use of a site should not be considered unless a parking credit applies i.e. contributions towards the provision of additional off-site parking, when establishing any new parking requirement),

e) The existing permit scheme for the East Burwood Reserve car park should be reviewed to reassess the appropriateness of use of the car parks by non-reserve park users,

f) Measures to improve the operation of the Lakeside Drive/Burwood Highway/Woodvale Court intersection as discussed in Section 5.3.1 should be considered,

g) The implementation of traffic calming devices and No Stopping restrictions in Region 2 will improve the traffic conditions internal to Region 2,

h) Access plans be considered as a tool to reduce car parking and travel (motor vehicle) demand,

i) Future development of Region 1 is expected to generate a significant increase in traffic and a new signalised access arrangement should be provided at Springvale Road, and

j) The operation of the existing access arrangement at Springvale Road for Region 1 should be reviewed as part of any future development and an alternative left out only access arrangement be considered at Burwood Highway.

APPENDIX A

Tally Ho Business Park, Burwood East
Parking Occupancy Survey

Surveyed by: Rick Williams
Supervised by: Veronica Skrzyniarz

Survey Date: Tuesday 30th November, 2004
Survey Time: 10:00am - 4:00pm

LOCATION	RESTRICTION	CAPACITY	NUMBER OF CARS PARKED		
			10:15-11:30	12 - 1:30pm	3 - 4pm
Lakeside Drive					
North East Side					
Burwood Hwy - #1	Unrestricted	6	11	8	2
#1 - #9 north access	Unrestricted	2	3	3	3
9 Lakeside Drive	No Standing	-	0	0	0
North of #9 south access	Unrestricted	4	6	4	3
#9 south access - #1 south access	Unrestricted	9	13	9	11
#1 south access - #23 access	Unrestricted	3	3	3	3
#23 access - #29 access	Unrestricted	7	9	7	7
#29 access - #380 Burwood Hwy access	Unrestricted	3	4	4	3
#380 Burwood Hwy access - #20 access	Unrestricted	0	1	1	1
#20 access - #24 access	Unrestricted	2	3	3	2
Lakeside Drive roundabout - inner kerb	No Standing	-	0	0	0
South West Side					
Burwood Hwy - S of #6 access	Unrestricted	6	7	6	6
S of #6 Access to #6 Access	2P 8am - 6pm Mon - Sat	1	1	1	1
#6 access - #8 access	2P 8am - 6pm Mon - Sat	8	6	6	6
south of #8 access	2P 8am - 6pm Mon - Sat	1	1	1	0
restricted parking south of #8 - Wesley Drive	Unrestricted	2	3	3	2
Wesley Drive - #18 west access	Unrestricted	7	9	9	7
#18 west access - #18 east access	Unrestricted	13	17	16	15
divider island, opp. #18 east access	Unrestricted	1	0	0	1
#18 east access - #26 access	Unrestricted	1	1	1	1
#26 access - #20 access	Unrestricted	8	9	8	6
Total	-	84	107	93	80
No. of Spaces Available	-		-23	-9	4
Percentage Occupancy	-		127%	111%	95%

Tally Ho Business Park, Burwood East
Parking Occupancy Survey

Surveyed by: Rick Williams
Supervised by: Veronica Skrzyniarz

Survey Date: Tuesday 30th November, 2004
Survey Time: 10:00am - 4:00pm

LOCATION	RESTRICTION	CAPACITY	NUMBER OF CARS PARKED		
			10:15-11:30	12 - 1:30pm	3 - 4pm
1 Lakeside Drive					
Fujitsu		32	23	26	23
AMCOR/Fujitsu (unmarked, gated)		45	46	42	41
Café Oggi		14	9	11	7
ECV		14	14	9	6
AV Jennings		22	14	14	12
AV Jennings	Loading Zone	1	0	0	0
Coordimax		10	10	10	10
FAL - Foodland Associated Limited		39	39	37	39
Disabled		2	3	3	2
Other[1]		-	8	5	7
Total	-	179	166	157	147
No. of Spaces Available	-		13	22	32
Percentage Occupancy	-		93%	88%	82%
9 Lakeside Drive - Yokogawa					
North Access	Unmarked	4	2	3	1
South Access	Unmarked	10	2	2	2
Secure Underground	Unmarked	20	11	11	11
Total	-	34	15	16	14
No. of Spaces Available	-		19	18	20
Percentage Occupancy	-		44%	47%	41%
23 Lakeside Drive - RLM					
Gate Access	Marked	14	11	11	11
Gate Access	Disabled	1	0	0	0
Gate Access	Loading Dock	6	1	1	1
Gate Access	Underground[2]	165	157	155	154
Total	-	186	169	167	166
No. of Spaces Available	-		17	19	20
Percentage Occupancy	-		91%	90%	89%

Tally Ho Business Park, Burwood East
Parking Occupancy Survey

Surveyed by: Rick Williams
Supervised by: Veronica Skrzyniarz

Survey Date: Tuesday 30th November, 2004
Survey Time: 10:00am - 4:00pm

LOCATION	RESTRICTION	CAPACITY	NUMBER OF CARS PARKED		
			10:15-11:30	12 - 1:30pm	3 - 4pm
29 Lakeside Drive - DoET, KFC, CBA, Alstom, EMR					
Alstom	Marked	7	7	5	7
Commonwealth Bank	Marked	5	5	5	5
EMR	Marked	15	8	7	11
KFC	Marked	11	8	9	9
Other[1]	-	-	1	2	4
Total	-	38	29	28	36
No. of Spaces Available	-		9	10	2
Percentage Occupancy	-		76%	74%	95%
380 Burwood Highway - Colombo's					
	Unmarked	96	14	48	40
	Disabled	1	0	0	0
Total	-	97	14	48	40
No. of Spaces Available	-		83	49	57
Percentage Occupancy	-		14%	49%	41%
33 Lakeside Drive - Canon					
	Unmarked	120	56	58	52
	Disabled	2	0	0	0
Underground[2, 5]		57	57	57	57
Total	-	179	113	115	109
No. of Spaces Available	-		66	64	70
Percentage Occupancy	-		63%	64%	61%

Tally Ho Business Park, Burwood East
Parking Occupancy Survey

Surveyed by: Rick Williams
Supervised by: Veronica Skrzyniarz

Survey Date: Tuesday 30th November, 2004
Survey Time: 10:00am - 4:00pm

LOCATION	RESTRICTION	CAPACITY	NUMBER OF CARS PARKED		
			10:15-11:30	12 - 1:30pm	3 - 4pm
24 Lakeside Drive - Lakeside Centre					
ALMAX	Marked	3	1	1	0
Beiersdorf Australia Limited	Marked	8	5	6	5
BULL Graphics	Marked	5	5	3	5
CGA Bryson	Marked	5	3	2	3
CRAY	Marked	2	0	0	0
Crossmark Asia Pacific	Marked	9	8	4	7
DeMedia	Marked	2	1	1	1
DJM Building Consultants	Marked	2	0	1	2
Financial Partership	Marked	4	2	3	3
GAC Australia	Marked	4	1	1	2
GT Australia	Marked	2	1	1	2
Leadtec	Marked	5	5	3	4
Nutshack	Marked	3	2	2	1
T H B U A	Marked	4	1	1	2
WIKA	Marked	2	2	1	1
Disabled	Marked	2	1	0	0
Visitor	Marked	6	4	2	6
Unmarked	Unmarked	1	0	1	0
Underground[2]	Marked	30	17	12	16
Total	-	99	59	45	60
No. of Spaces Available	-		40	54	39
Percentage Occupancy	-		60%	45%	61%
20 Lakeside Drive - Pronto Software					
	Visitors	9	5	3	3
	Disabled	1	0	0	0
	Unmarked	66	59	47	46
Underground Bitumen	Unmarked	12	11	11	11
Underground Bitumen	Reserved	8	6	6	6
Underground Gravel	Unmarked	22	22	20	22
Total	-	118	103	87	88
No. of Spaces Available	-		15	31	30
Percentage Occupancy	-		87%	74%	75%

Tally Ho Business Park, Burwood East
Parking Occupancy Survey

Surveyed by: Rick Williams
Supervised by: Veronica Skrzyniarz

Survey Date: Tuesday 30th November, 2004
Survey Time: 10:00am - 4:00pm

LOCATION	RESTRICTION	CAPACITY	NUMBER OF CARS PARKED		
			10:15-11:30	12 - 1:30pm	3 - 4pm
16 Lakeside Drive - McConnell Dowell					
	Visitor	8	3	3	2
	Unmarked	60	43	43	27
Underground	Unmarked	50	37	24	32
Total	-	118	83	70	61
No. of Spaces Available	-		35	48	57
Percentage Occupancy	-		70%	59%	52%
12 Wesley Court - MYOB					
	Unmarked	122	125	104	124
	Couriers/Visitors	25	24	19	22
	Reserved	10	7	6	7
	Disabled	2	0	0	0
Underground[3]	-	-	Full[4]	-	-
Total	-	159	156	129	153
No. of Spaces Available	-		3	30	6
Percentage Occupancy	-		98%	81%	96%
10 Wesley Court - Motorola					
	Disabled	2	1	0	1
	Visitors	3	2	2	2
	Unmarked	42	42	40	40
Gated ground floor	Unmarked	57	57	53	55
Gated first floor	Unmarked	55	52	52	47
	Loading Dock	3	3	2	0
Total	-	162	157	149	145
No. of Spaces Available	-		5	13	17
Percentage Occupancy	-		97%	92%	90%
4 Wesley Court - RLM					
	Unmarked Visitors	7	6	5	7
Underground[3, 5]		-	-	-	-
Total	-	7	6	5	7
No. of Spaces Available	-		1	2	0
Percentage Occupancy	-		86%	71%	100%

Tally Ho Business Park, Burwood East
Parking Occupancy Survey

Surveyed by: Rick Williams
Supervised by: Veronica Skrzyniarz

Survey Date: Tuesday 30th November, 2004
Survey Time: 10:00am - 4:00pm

LOCATION	RESTRICTION	CAPACITY	NUMBER OF CARS PARKED		
			10:15-11:30	12 - 1:30pm	3 - 4pm
12 Lakeside Drive - VicRoads					
Gated	VicRoads vehicles (red number plates)	75	70	65	72
Gated	VicRoads staff	162	160	160	153
Gated	VicRoads heavy vehicles	10	0	2	3
	Visitor	85	73	79	62
	Disabled	3	1	0	1
	Tester Vehicles	7	6	7	1
Total	-	342	310	313	292
No. of Spaces Available	-		32	29	50
Percentage Occupancy	-		91%	92%	85%
8 Lakeside Drive - CFA					
	CFA Visitors	8	8	7	6
	Loading Bay	1	0	0	0
	Disabled	1	0	0	0
	Unmarked	32	33	32	32
	Reserved	3	0	0	2
Underground[2]	Unmarked	83	77	78	78
Total	-	128	118	117	118
No. of Spaces Available	-		10	11	10
Percentage Occupancy	-		92%	91%	92%
4 Lakeside Drive - AV Jennings National Head Office					
	CFA Visitors	24	24	23	23
	Unmarked	25	27	27	24
	Reserved	10	8	7	9
	Disabled	1	0	0	1
Total	-	60	59	57	57
No. of Spaces Available	-		1	3	3
Percentage Occupancy	-		98%	95%	95%

Tally Ho Business Park, Burwood East
Parking Occupancy Survey

Surveyed by: Rick Williams
Supervised by: Veronica Skrzyniarz

Survey Date: Tuesday 30th November, 2004
Survey Time: 10:00am - 4:00pm

LOCATION	RESTRICTION	CAPACITY	NUMBER OF CARS PARKED		
			10:15-11:30	12 - 1:30pm	3 - 4pm
6 Lakeside Drive - AV Jennings Victorian Head Office					
	Visitors	7	6	2	1
	Disabled	2	0	0	0
	Reserved	44	34	41	37
Total	-	53	40	43	38
No. of Spaces Available	-		13	10	15
Percentage Occupancy	-		75%	81%	72%
Area Total	-	2043	1704	1639	1611
No. of Spaces Available in Area	-	-	339	404	432
Percentage Occupancy of Area	-	-	83%	80%	79%

Notes:
(1) Parked not within bays
(2) Figures are approximate - insufficient access was available for accurate counts
(3) No figures available - no access
(4) According to electronic signage
(5) Capacity obtained from *Andrew O'Brien & Associates Pty Ltd* parking study: *report - June 24, 1999*. Not verified

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Traffic Engineering Assessment

Tally Ho Urban Design Framework Supplementary Report

Prepared for

Whitehorse City Council

September, 2006

8424R3101

Traffic Engineering Assessment

Tally Ho Urban Design Framework
Supplementary Report

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Our Reference: 8427R3101

Prepared By

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TABLE OF CONTENTS

1 Introduction 1

2 Study Area 1

2.1 Land Use 2

2.2 Road Network 2

2.3 Public Transport 2

3 Transport Improvements 3

3.1 Public Transport 3

3.1.1 Trams 3

3.1.2 Buses 4

3.2 Bicycle Network 6

3.2.1 Off-Road Facilities 7

3.2.2 Shared Facilities 8

3.2.3 Signed Routes 8

4 Future Development And Traffic Volumes 9

4.1 Hewlett Packard and Agilent Technologies Site 10

4.2 27-29 Vision Drive 10

4.3 385 Burwood Highway (Burvale Hotel) 11

5 Recommended Access Arrangements 11

5.1 Vision Drive 11

5.2 Springvale Road 12

6 Pedestrians 14

6.1 Crossing Facilities 14

6.1.1 Springvale Road 14

6.1.2 Mahoneys Road/Burwood Highway 14

6.2 Footpaths 15

7 Conclusions 16

1 INTRODUCTION

Traffix Group has been engaged by MGS Architects on behalf of Whitehorse City Council to undertake a supplementary traffic engineering assessment of the Tally Ho Precinct and surrounding area as per the confines of the study area to accompany our 'Traffic Engineering Assessment, Tally Ho Urban Design Framework' report prepared in January 2005.

In particular, this supplementary report provides an assessment of potential access arrangements on Springvale Road, identifies potential improvements for other transport modes and forms the basis for the traffic engineering aspects of the Urban Design Framework that has been prepared by MGS Architects.

2 STUDY AREA

The study area for the purpose of this supplementary assessment is as shown in Figure 1.

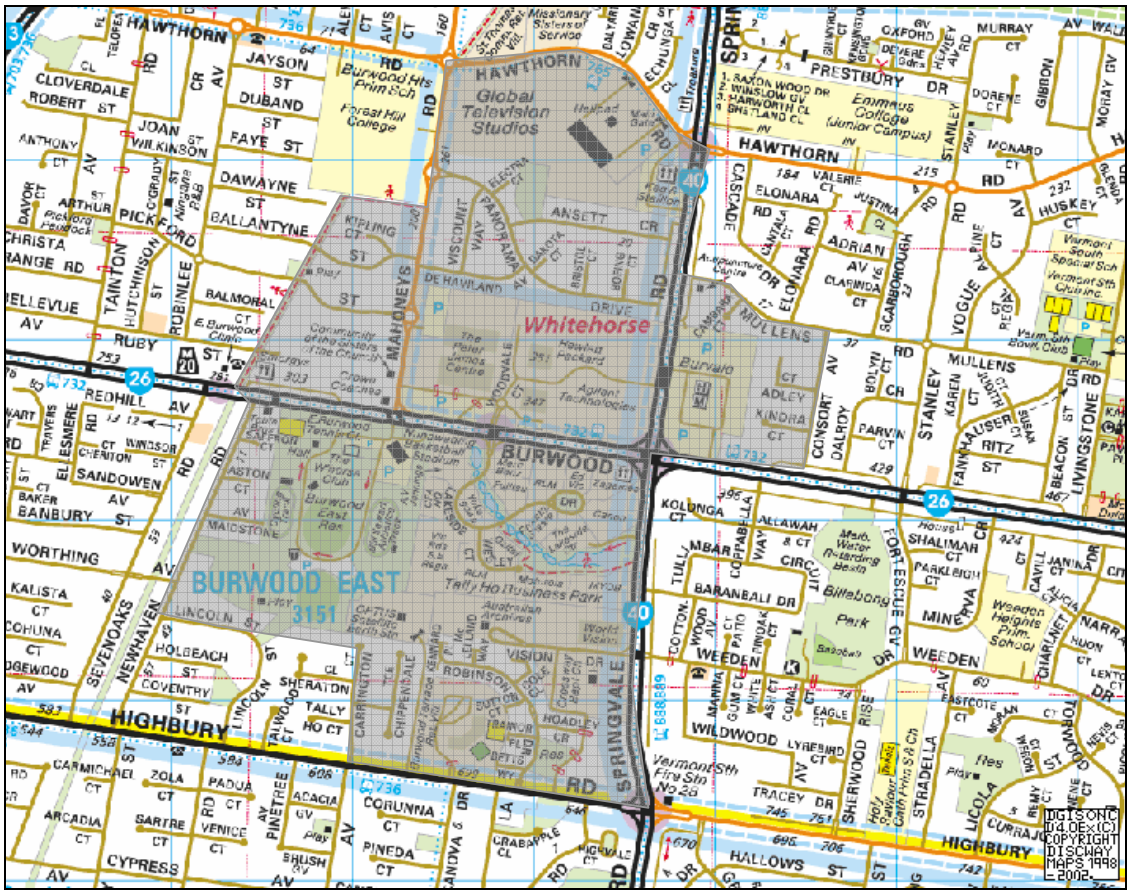

Figure 1: Study Area

There have been a number of developments to the road network and potential future land uses within the study area since January 2005. A summary of the key developments is provided in the following subsections.

2.1 Land Use

We understand that a number of potential developments are on the horizon within the study area in the short term, i.e. expected within the next 10-15 years. While no formal proposals have been submitted to Council for consideration of a planning permit, potential developments that may be put forward include the following:

- Increased development of the Peter James Centre,
- Multi-storey business development on the Hewlett Packard/Agilent Technologies site including a multi-storey carpark,
- Medium density mixed use development of the Crown Coaches site including residential, office and retail components,
- Mixed use development of the Burvale Hotel site including potential residential and retail components, and
- Redevelopment of the Global Television Studios site, including residential dwellings.

We also understand that a permit has been granted for the development of a 282 space carpark by Crossway Baptist Church on the currently vacant site at 27-29 Vision Drive.

2.2 Road Network

A number of changes have occurred to the road network within the study area since January 2005 as part of the Vermont South Tram Extension project. The extension of Tram Route 75 along Burwood Highway from the intersection of Blackburn Road to Hartland Road (adjacent to the Vermont Shopping Centre) entailed significant road works. A number of modifications to existing intersections were also undertaken within the study area. A summary of key works is as follows:-

- Construction of a tramline within the Burwood Highway central median and three raised DDA compliant tram super-stops,
- Signalisation of the Sevenoaks Road and Burwood Highway intersection including rationalisation of the pedestrian signals previously located to the east of Sevenoaks Road,
- Local widening of Burwood Highway at its intersections with Mahoneys Road and Lakeside Drive, and
- Local widening of the Springvale Road/Burwood Highway intersection and modifications to the intersection including lengthening of turn lanes.

2.3 Public Transport

The Tally Ho Business Precinct is reasonably well served by public transport with the recent extension of Tram Route 75 and a number of bus routes servicing the area.

Tram Route 75 operates along Burwood Highway providing a service between the Melbourne CBD and Vermont South Shopping Centre where it terminates at a bus interchange.

Bus Route 732 provides a service between Box Hill Central and Upper Ferntree Gully Railway Station via Burwood Highway.

Bus Routes 888 and 889 are Smartbus services that run along Springvale Road operating between Nunawading and Chelsea Railway Stations. Features of the Smartbus services include:-

- Weekday services operating every 15 minutes between 6am and 7pm,
- Weekday services operating every 30 minutes between 7pm and 10:45pm, with a final service at 11:30pm,
- Weekend services commencing around 7am operating every 40 minutes until around 9pm, and
- Real time information signs provided at key stops along the Smartbus route.

Figure 2 illustrates the public transport services that operate within the study area.

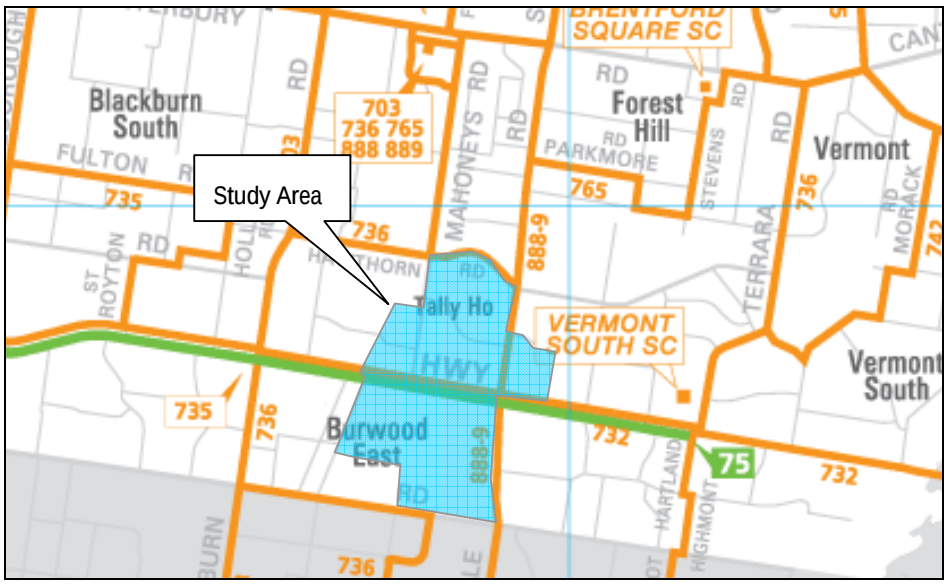

Figure 2: Public Transport Map

3 TRANSPORT IMPROVEMENTS

3.1 Public Transport

An audit of the existing public transport facilities within the study area was undertaken by staff of Traffix Group. This section provides an overview of the bus and tram facilities within the study area and provides recommendations to further improve public transport.

3.1.1 Trams

Tram stops recently installed on the departure side of the Springvale Road/Burwood Highway intersection as part of the Vermont South tram extension have high quality facilities with seating, shelter, lighting, real time information and rubbish bins provided at the stops.

Tram stop 73 on Burwood Highway and the electronic real time information sign at the stop are shown in Figures 3 & 4. The location of tram stops are shown in Figure 5.

Figure 3: Tram Stop 73 (Route 75)

Figure 4: Real time information sign

3.1.2 Buses

Bus stops along Springvale Road and Burwood Highway were audited for accessibility and amenity. Figure 5 illustrates the existing bus stop locations.

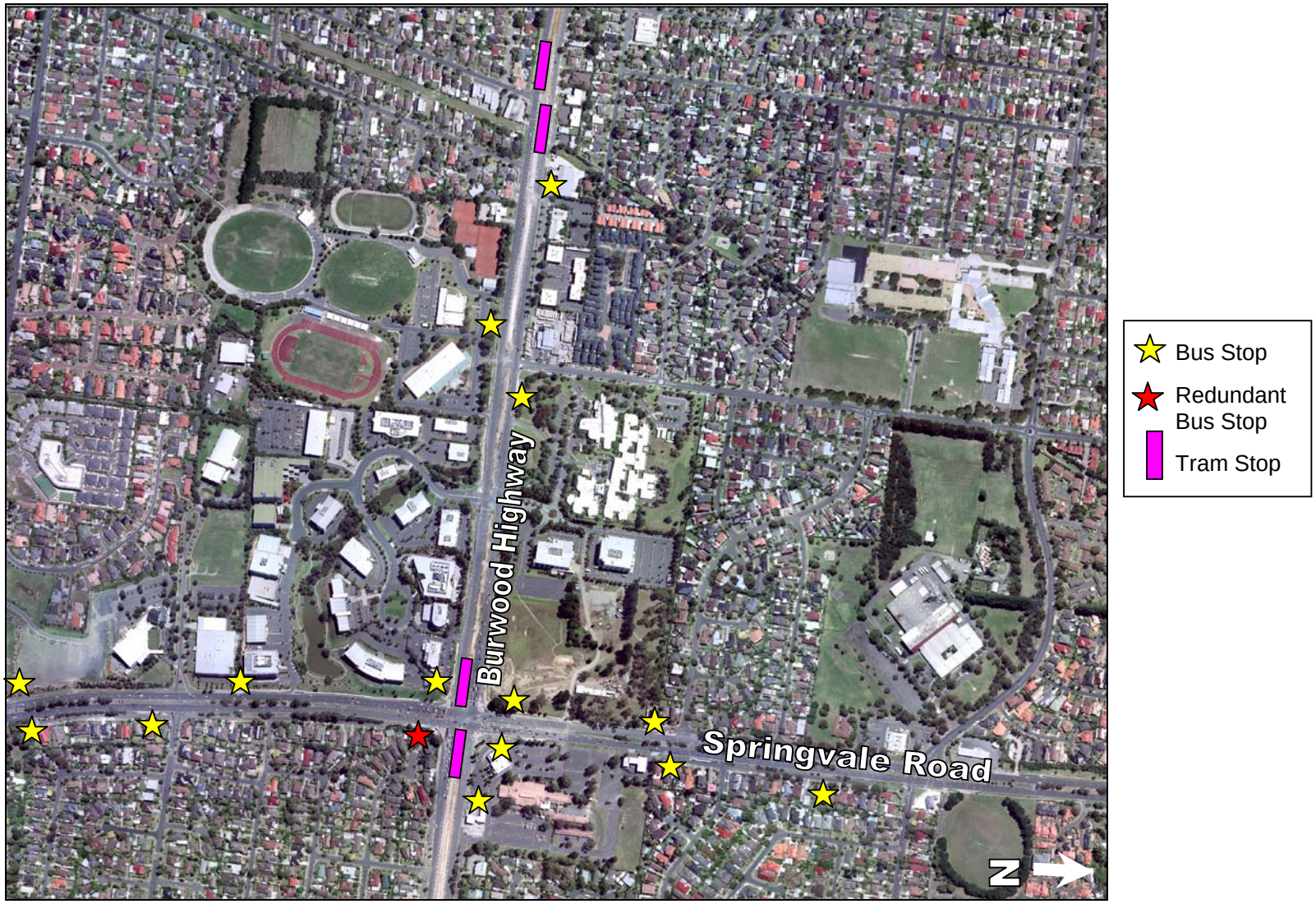

Figure 5: Map of Tram and Bus Stops

Bus stops were generally found to be well spaced, and reasonably located to serve the main activity attractors in the study area. In particular, a stop located on the approach side of the Springvale Road/Burwood Highway intersection, located adjacent to the Burvale Hotel, was found to be rationalised with a southbound stop on the departure side of the intersection made redundant. While the location of the redundant stop is considered to be more appropriate for passengers travelling to and from the Tally Ho business park, the existing location is appropriate for the long term with the Hewlett Packard/Agilent Technologies and Burvale Hotel sites also served.

The audit indicated that there is potential to improve access to and facilities for bus services as follows:

- Relocate the existing eastbound bus stop located on the departure side of Springvale Road/Burwood Highway closer to the intersection. The development of the Burvale Hotel site may provide an opportunity to improve the locality of the bus stop so that it better services the Business Park and Burvale Hotel site, as well as being more conveniently located to the tram stop on Burwood Highway on the departure side of the intersection.current

- Extend the existing footpath on the east side of Springvale Road that currently terminates north of the Burwood Highway at the bus stop further north to connect to the existing footpath along the Springvale Road service road.

- Provide a shelter at the bus stop located on the west side of Springvale Road, north of Burwood Highway.

- Improve access to the southbound Glen Waverley and Chelsea Railway Station bus stop located north of Springvale Road/Highbury Road intersection. Signalisation of the Vision Drive/Springvale Road intersection as discussed further in Section 5.1 or other measures i.e. pedestrian operated signals would provide direct pedestrian access to the stop from the Tally Ho Business Park.

The introduction of new traffic signals on Springvale Road adjacent to the Hewlett Pack/Agilent Technologies and Burvale Hotel site, as discussed in Section 5.2, would have an impact on the existing bus stop located on the east side of Springvale Road, approximately midway between Hawthorn Road and Burwood Highway. New traffic signals will result in the bus stop being located on the approach side of a signalised intersection and subsequently queued vehicles possibly impeding egress from the bus stop.

The introduction of a bus detection and priority signal phasing treatment could be considered as a mitigating measure against any delays the service may potentially incur as a result of new traffic signals. Alternatively, the subject bus stop and neighbouring stops could be rationalised so that all stops are relocated to the departure side of intersection signals.

3.2 Bicycle Network

An assessment has been undertaken to identify the existing bicycle paths and opportunities for the provision of off-road paths and shared facilities within the study area.

VicRoads has developed a Principal Bicycle Network (PBN) plan that identifies the proposed on-road bicycle network on arterial roads. The PBN within the study area and surrounds is shown in Figure 6.

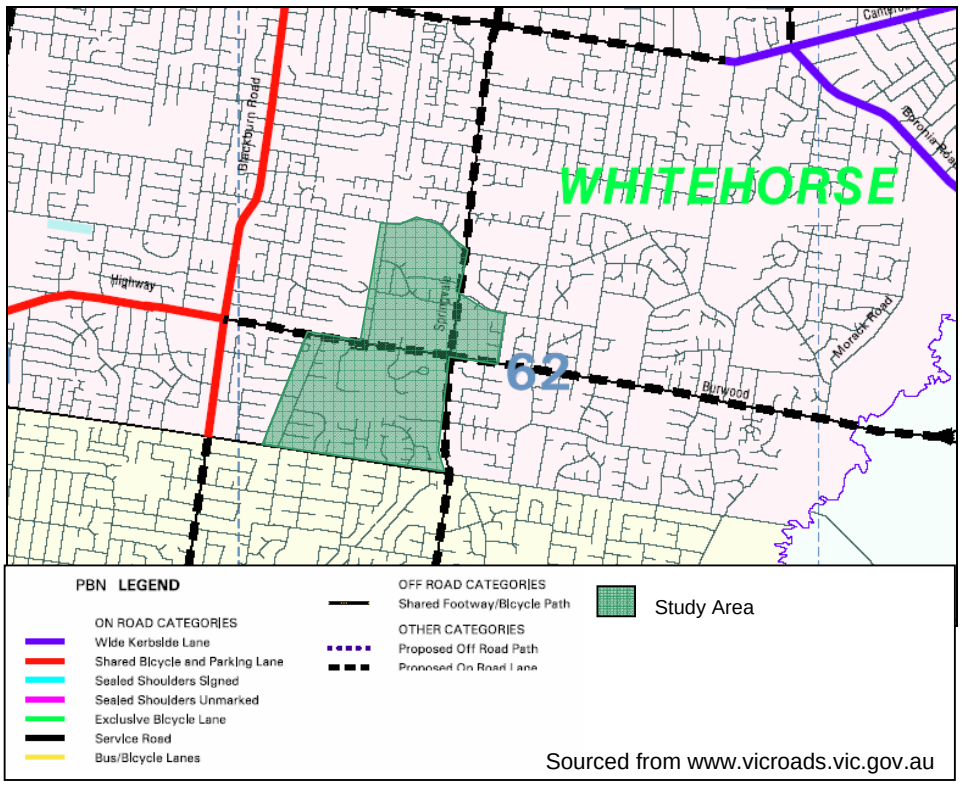

Figure 6: Principal Bicycle Network

Potential paths have been identified that connect either to on road routes designated as part of the PBN, existing bicycle paths and main activity generators e.g. Tally Ho Business Park and the East Burwood Reserve.

3.2.1 Off-Road Facilities

The existing Melbourne Water pipe track reservation runs in a generally north east-southwest direction between Highbury Road and Whitehorse Road. Intermittent sections of the pipeline follow road alignments and railway reserves.

The pipe track reservation provides a corridor between existing bicycle paths within the City of Monash, south of the study area, and the proposed bicycle trail in the north east that is to be constructed as part of the Mitcham-Frankston freeway project.

An existing section of the pipe track corridor between Canterbury Road and Rooks Road (north of the study area) currently accommodates a bicycle path. The corridor also accommodates a gravel trail between Burwood Highway and Burwood Heights Primary School and between Hawthorn Road and Springvale Road. It is expected that the trail is used by cyclists as well as pedestrians. Figures 7 and 8 show existing sections of the pipe track reservation.

Figure 7: Pipe track reservation north of Burwood Highway

Figure 8: Pipe track reservation south of Burwood Highway

The pipe track reservation provides an excellent opportunity to provide an off-road bicycle path within the study area, particularly given that there is an existing crossing facility on Burwood Highway within close proximity that provides excellent connectivity between the north and south sections.

Given that the land is managed by Melbourne Water we recommend that Council continue to pursue this potential bicycle path with Melbourne Water.

3.2.2 Shared Facilities

While the PBN identifies an on-road bicycle facility along Burwood Highway, the provision of an alterative bicycle facility to facilitate bicycle movements between Mahoneys Road and the activity generators on the south side of Burwood Highway, i.e. Tally Ho Business Park and the East Burwood Reserve, a shared facility should be considered.

The reservation on the north and south side of Burwood Highway between Mahoneys Road and the Lakeside Drive is sufficient to accommodate a shared footpath for pedestrian and bicycle use.

While this section has been specifically identified, it is considered that shared off-road paths should be facilitated between the pipe track and Springvale Road to improve local bicycle movement where possible and would require further investigation by Council.

3.2.3 Signed Routes

Further to the facilities identified above, sections of a bicycle network can be achieved by sign posting low traffic volume local streets as designated sections of a bicycle route.

Development of an off-road facility on the pipe-track reservation could be complimented with a signed route directing cyclists to the East Burwood Reserve via Worthing Avenue and New Haven Road.

Potential additions to the bike network within the study area is shown in Figure 9.

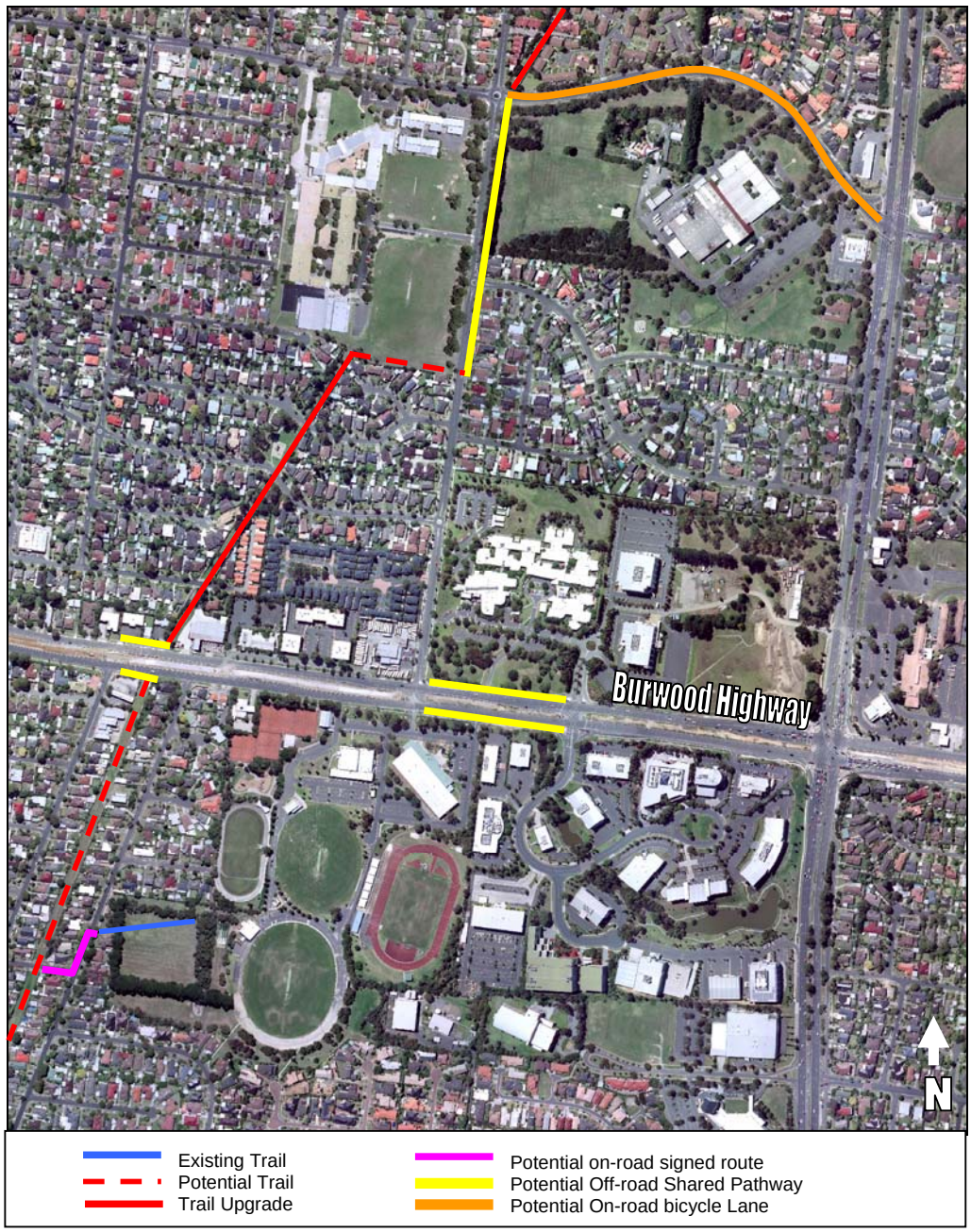

Figure 9: Potential Additions to the Bicycle Network

4 FUTURE DEVELOPMENT AND TRAFFIC VOLUMES

This section provides an overview of future traffic volumes generated by the potential development of the Hewlett Packard and Agilent Technologies site at the corner of Springvale Road and Burwood Highway, 385 Burwood Highway (Burvale Hotel) and 27-29 Vision Drive.

4.1 Hewlett Packard and Agilent Technologies Site

Council has estimated that the vacant land located to the east of Hewlett Packard and Agilent Technologies in Region 1 will ultimately accommodate in the order of 30,000m^2 of office floor area and in the order of 1,200 employees at a density rate of 4 employees per 100m^2. The predicted floor area is expected to generate approximately 3,000 to 4,500 additional vehicle trip ends per day, assuming a lower limit car driver mode split in the order of 55% and upper limit car driver mode split of 85%. Of these, around 20% (or around 900 vehicle trip ends) will be generated during each peak hour.

When compared to the existing traffic generated by the developments at 347 and 351 Burwood Highway, which is in the order of 1,650 vehicle trip ends per day and around 330 vehicle trip ends in each peak hour, the overall increase in traffic for the region is significant (up to 270% increase in traffic volume).

4.2 27-29 Vision Drive

We understand that a permit has been granted to develop the vacant land at 27-29 Vision Drive, located on the north side of Vision Drive, to accommodate an at grade carpark with 282 car spaces. Council has advised that Crossway Baptist Church located at 2 Vision Drive is planning to increase patronage from 1,200 to around 2,500 patrons and are to develop the carpark to provide for overflow parking demands. We further understand that the carpark is to be made commercially available for use by MYOB by way of a lease agreement and that a pedestrian and vehicle access ramp is proposed between the carpark and MYOB's carpark that abuts 27-29 Vision Drive to the north.

We expect that the at-grade carpark that has obtained planning approval will generate traffic during the peak hours at a rate of 0.6-0.8 vehicle trip ends per space. The 282 car spaces are therefore expected to generate in the order of between 170 and 226 vehicle trip ends during each peak hour.

We further understand that the site has been identified as a potential multi-storey carpark development site.

The development of a multi-storey carpark on the site could be expected to accommodate around 200-250 spaces on a single level, dependant on the particulars of the design. A multi-storey carpark that accommodates 400 spaces is expected to generate between 240 and 320 vehicle trip ends during each peak hour and between 300 and 400 vehicle trip ends during each peak hour for a 500 space carpark, in the event that all spaces are occupied.

A car parking assessment to estimate the actual car parking demand of businesses located within Tally Ho Business Park undertaken by our office in January 2005 suggested that an overflow car parking demand of around 200 vehicles could be expected as a result of MYOB's intention to increase their staff numbers by around 80 and all of the sites within the Business Park being occupied - at the time of the survey No. 4 Wesley Court was being refurbished. We also note that further development of the Business Park is likely to result in a further demand for off-site overflow car parking which could also make use of a commercially operated multi-storey carpark.

4.3 385 Burwood Highway (Burvale Hotel)

Council has indicated that future development of the Burvale Hotel site is likely to be of medium density and comprise a mixture of uses including accommodation, retail, commercial and hospitality/entertainment uses.

While estimations of the potential floor areas have not been provided, a qualitative assessment indicates that traffic generated by the site will increase substantially from the existing generation, with components of the future development generating traffic peaks that coincide with the commuter peaks as opposed to the existing use.

5 RECOMMENDED ACCESS ARRANGEMENTS

While a detailed assessment of any future development will be the subject of a separate study, this section seeks to identify a coordinated access arrangement which will provide for future traffic volumes generated by the sites discussed in Section 4.

5.1 Vision Drive

Vision Drive intersects with Springvale Road opposite Weeden Drive and is currently an unsignalised intersection. An auxiliary turning lane provides for left turn movements into Vision Drive from Springvale Road, and a median opening on Springvale Road with auxiliary right turn lanes is provided for right turn movements into Vision Drive and Weeden Drive. The median opening also provides for staging of straight through movements from Weeden Drive into Vision Drive.

Egress from Vision Drive is restricted to a left turn only to Springvale Road. Motorists wanting to head south upon exiting Vision Drive are able to perform a U-turn at the U-turn facility on Springvale Road located approximately 200m north of Vision Drive.

Figures 10 to 13 show the existing Vision Drive/Springvale Road/Weeden Drive intersection arrangements.

Figure 10: Springvale Road/Vision Drive, Looking North

Figure 11: Springvale Road/ Vision Drive, Looking South

Figure 12: Weeden Drive/Springvale Road, Looking East

Figure 13: Vision Drive/Springvale Road, Looking West

The increased traffic demand as discussed in Section 4.2 as a result of the construction of a carpark in Vision Drive is expected to increase vehicle trip ends during commuter peak hours. In our experience an upgrade of the existing access arrangement will be required to provide adequate and safe access arrangements for the likely increase in vehicle trip ends.

We also recommended that a traffic study analysing the impact of any proposed development of a multi-storey carpark on the vacant land at 27-29 Vision Drive be undertaken by consultants at the appropriate time, as in our experience additional mitigating works may be required.

Further, we consider signalisation of the Vision Drive/Weeden Drive/Springvale Road intersection, with appropriate provision of left and right turn lanes, to be a suitable access arrangement which would be a significant improvement over the existing conditions. Signalisation of the intersection would also present an opportunity to provide pedestrian crossing facilities. However this should not be considered as the only means for providing pedestrian facilities as discussed further in Section 6.1.1.

We note that signalisation of local streets can induce additional non-local traffic and this should be taken into consideration for any potential intersection signalisation with regards to the design and operation e.g. appropriate signal phasing to deter non-local traffic.

5.2 Springvale Road

As discussed in Section 8 of the 'Traffic Engineering Assessment, Tally Ho Urban Design Framework' report prepared by our office in January 2005, we believe that the most appropriate intersection arrangement for future development of the Hewlett Packard/Agilent Technologies site is likely to be a signalised intersection at Springvale Road and recommend that a traffic study analysing the impact of any proposed development be undertaken by consultants at the appropriate time.

We understand that the site at 385 Burwood Highway is to be fully developed in the future. Increased use of the existing site is expected to generate additional traffic as discussed at Section 4.3 and is likely to also necessitate the provision of a signalised access arrangement.

It is our opinion that a signalised intersection should be earmarked to control future traffic movements generated by future development of both of the fore mentioned sites so as to minimise the number of access points and impact on Springvale Road and provide a coordinated approach. While both sites have existing access arrangements that connect

to Springvale Road, the proximity of the Springvale Road/Burwood Highway intersection makes signalisation of the current access points not ideal.

The operation of a signalised access point at least 200m north of the Springvale Road/Burwood Highway intersection would provide spacing between signals that is generally accepted on primary arterial roads. Inspections of the Springvale Road carriageway around 200m north of its Burwood Highway intersection shows that the northbound carriageway is elevated above the southbound carriageway with the central median sloping between the two carriageways and would need to be considered as part of any detailed design.

Figures 14 to 17 show the existing Vision Drive/Springvale Road/Weeden Drive intersection arrangements.

Figure 14: Springvale Road, Looking North

Figure 15: Springvale Road, Looking South

Figure 16: Burvale Hotel, Springvale Road Southern Access

Figure 17: Hewlett Packard/Agilent Technologies Springvale Road Access

Interim access arrangements may be appropriate depending upon staging of the various developments e.g the existing median opening on Springvale Road could still be made available for vehicles travelling north to perform a right turn to access the Burvale Hotel.

As a result of the potential signals on Springvale Road as discussed above, we believe that the existing unsignalised movements at the current Springvale Road access to the Helwett Packard/Agilent Technologies and Burvale Hotel site should be reviewed.

6 PEDESTRIANS

6.1 Crossing Facilities

6.1.1 Springvale Road

As discussed in the Section 5, we recommend that a signalised access arrangement be provided as part of any future development of the Hewlett Packard/Agilent Technologies site and/or the Burvale site.

We anticipate that development on these sites in the future will generate pedestrian movements across Springvale Road and that it would be beneficial for any signalised access arrangement to include a crossing facility for pedestrians as part of detailed design.

Similarly, signalisation of the Vision Drive, Springvale Road and Weeden Drive intersection would present an opportunity to provide a midblock pedestrian crossing facility on Springvale Road improving connectivity to the bus stop situated on the east side of Springvale Road. A signalised pedestrian crossing located in the vicinity of the intersection (as opposed to inclusion as part of intersection signals) should also be investigated.

6.1.2 Mahoneys Road/Burwood Highway

The Mahoneys Road/Burwood Highway intersection is located opposite an access road for the East Burwood Reserve. The layout of the intersection provides for left and right turn movements into Mahoneys Road and the reserves' access road, with vehicles crossing the tram tracks located in a central median required to give way to trams. Egress from Mahoneys Road and East Burwood Reserve is restricted to left only movements.

While there is a desire line for pedestrians to cross Burwood Highway at the Mahoneys Road intersection to access the reserve or nearby bus stop and vice versa there are no existing pedestrian crossing facilities at the intersection.

The only exclusive pedestrian facility which is considered appropriate for Burwood Highway is pedestrian operated signals (POS). VicRoads Traffic Engineering Manual, Volume 1, provides numerical guidelines for the installation of POS on arterial roads. It is unlikely that the guidelines based on crossing demand as follows, are met:

- *For any hour on an average weekday,*
- *the number of pedestrians crossing within 20m of the proposed site exceeds 100, and*
- *the number of vehicles which pedestrians have to cross exceeds 500 on an undivided.*

Further, the guidelines set out that a POS may be provided where the following guideline is met:

- *Where accident records indicate that two or more pedestrian casualty accidents have occurred in the last three years.*

An assessment of the accident history involving pedestrians for the intersection was undertaken by analysing accident data for the five-year period, January 2000 to

December 2004 of the State Accident Records. The State Accident database contains all reported casualty accidents, which include the categories of Fatal, Serious Injury and Other Injury accidents. Non-injury or property damage only accidents are not included in this database.

The categories of accident severity are defined as follows:

Fatal: One or more persons are killed in the crash, or die within 30 days from injuries sustained in the crash.

Serious Injury: One or more persons are admitted to hospital as a result of injuries sustained in the crash.

Other Injury: One or more persons are given medical treatment for injuries sustained in the crash.

Results of the assessment show that there is one recorded accident that occurred 21m east of Mahoneys Road in October 2000 that involved a pedestrian and resulted in 'other injury'. These results do not satisfy the guidelines set out by VicRoads.

We also note that the above accident record is the only record shown for the intersection of Mahoneys Road and Burwood Highway within the State Accident database for the same five year period.

Nevertheless, while our above assessment indicates that POS do not meet VicRoads warrants and that the above accident record indicates no apparent safety requirement to signalise the intersection of Mahoneys Road/Burwood Highway at this time, this does not mean that either of these measures should not be considered with further development in the area. In our opinion either of these measures would be beneficial for pedestrians and should be pursued by developers, or even potentially be required as a result of additional traffic/pedestrian generation. Regard for this matter should be considered by Council as part of any planning permit for future development in the area.

6.2 Footpaths

The existing footpath on the east side of Springvale Road (adjacent to the Burvale Hotel), north of Burwood Highway only provides access to the bus stop. Pedestrian amenity can be further enhanced by extending the existing footpath further north to connect with the existing footpath that currently terminates at the southern end of the Springvale Road service road.

The level of connection between the internal footpath network in the Tally Ho Business Park and the external network at the parks eastern boundary is poor. While we appreciate that the Business Park is private property, the provision of an appropriately graded footpath that connects to the external network would be beneficial to staff accessing public transport.

7 CONCLUSIONS

Having undertaken an assessment of vehicular access and potential transport improvements within the Tally Ho Precinct, Traffix Group concludes that:-

a) there is opportunity for minor improvements to be made within the study area to improve access to public transport facilities as detailed in Section 3,

b) the Melbourne Water pipe track provides an ideal corridor for a bicycle trail and there is potential to integrate the trail into an overall network within the Precinct,

c) future development of the Hewlett Packard/Agilent Technologies site and Burvale Hotel site is expected to generate a significant increase in traffic and a new signalised access arrangement should be provided at Springvale Road that services both sites,

d) the operation of the existing access arrangement at Springvale Road for both development fore mentioned sites should be reviewed as part of any future development,

e) the construction of a 282 space carpark at 27-29 Vision Drive is expected to generate a significant increase in peak hour traffic and signalisation of the intersection of Vision Drive and Springvale Road will provide the most appropriate intersection control,

f) pedestrian facilities should be incorporated into the design of any future signalised intersection, particularly the locations identified at (d) and (e) above, and

g) an assessment of the Mahoneys Road/Burwood Highway intersection indicates there is limited opportunity to improve pedestrian amenity at this intersection as guidelines set out in VicRoads Traffic Engineering Manual, Volume 1 are not met. However, measures may be required or considered complimentary for future development in the area.

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Tally Ho UDF
Report on community consultation session and feedback

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10 December 2004

Contents

1. Introduction 1

2. What people value 1
2.1 A sense of openness 1
2.2 Built form 3
2.3 Car parking 5
2.4 Traffic 5
2.5 Public transport 5
2.6 Cycling and walking 6
2.7 Open space 7
2.8 Mix of uses 8

3. Conclusions 8

1. Introduction

This report sets out the results of the consultation session held between 6.00 pm and 8.00 pm Wednesday 10 November 2004 at the Whitehorse Club in the East Burwood Reserve. Forty people attended the session including residents, employees from the Business Park and local community group representatives.

The aim of the session was to obtain community input to the development of an Urban Design Framework for the Tally Ho Major Activity Centre.

Method of the analysis

The session was sound recorded and notes were taken. The notes summarised the discussion and included time code references to the audio record. Feedback was received from people who were unable to attend via email and comments on the flyer.

All responses were coded and sorted into themes using HyperResearch software for qualitative analysis. Direct quotes were then extracted from the audio recording via the time code references or from the emails or response sheets. Some of the quotes have been edited for sense and context.

How was the consultation session structured?

The consultation session was a facilitated discussion around a series of photographs of the area, with some comparison photos from other locations. The idea of planning for the area was well received:

> It's great to see this very busy, and diverse area receiving dedicated attention!

2. What people value

2.1 A sense of openness

The Business Park and commercial areas

Open areas

There was general support from participants for the open design of the Business Park and the spacing between buildings. People value the setting of buildings within open space – but this is not indiscriminate – they do not value the type of openness produced by the Burvale Hotel.

> Feeling while walking through is open. More buildings and you would lose that.

> The Burvale is not very attractive. … I don't think much of the Burvale either.

The different responses to the two types of openness – that of the Business Park and the Burvale – stems from the perception that the Business Park is a landscaped area, or a green haven. This was part of the overall concept of the Business Park. This is reinforced by the landscape quality of the lake and iconic nature of some of the landscape features such as the waterfall.

> They told a big story about the lake, the park and the 50 per cent coverage. That's what we accepted.

> Brides come to have their photographs on the bridge by the waterfall.

While most people reported that they found the buildings and layout of the Business Park attractive, this sentiment was not universal.

> I do not like the roads and buildings of the Business Park.

This openness is valued in its own right not just for the landscape quality but also for the buildings. Many of the areas between the buildings are used for car parking, but as participants pointed out, local people are likely to use the area when there are few cars.

Buildings fit into landscape

People appreciate the way the buildings fit into the landscape in the Business Park. This is in contrast to examples where the buildings dominate or are less well integrated. These ideas about fitting into the landscape were brought up again in the discussion about building styles (see below).

Residential areas

What people valued about the Business Park and commercial areas they also valued about the residential streets – though the building form was quite different. People valued: openness and a landscape setting. There was concern that this was being lost.

> The observed evidence over the last ten years from the district surrounding the centre is that blocks of land of even 600 sq. metres are insufficient in size - through removal of vegetation, redevelopment, and the introduction of hard surfacing - to guarantee the retention of large canopied trees and much of the local bird-life, etc.

Density

The discussion around this issue related to increased building bulk rather than increased household numbers. There was a range of concerns about higher density development expressed, both for residential and commercial development. Partly these concerns were related to ideas about openness:

> High density is claustrophobic, we need to keep openness and the vegetation.
>
> Modern buildings need the space around them.

Some of these concerns related to the impact of higher density development on the amenity of adjoining properties:

- overshadowing
- overlooking
- blocking of daylight.

Other concerns voiced (but not necessarily shared by all participants) related to the type of people higher density development was thought to attract.

> I bought one of those apartments in the city. Ninety per cent of the people who live there are renters – they just wreck the joint.

Another set of concerns related to the increased traffic congestion that might flow from increased densities.

> Population growth is an issue impinging on local amenity, most obviously (but not only) through growing road congestion … increased air pollution, further loss of green-space.

Catering for families

A concern with higher density development was that it might displace housing for young families:

> I am concerned that young people are not buying to live in the area.
>
> You must have a mix. We have schools, parks, we want people who will use them.

There was recognition of the need for different forms of housing for an aging population:

> People may want to scale down as they get older. They don't have the energy for a garden.

While this was accepted as a general principle by many participants, many participants did not see themselves living in higher density housing, unless they could maintain a sense of openness.

> I would live there if I could have the top floor.

Trees and landscape

There was support for trees and vegetation, but this was not universal There were those who valued the open un-treed landscapes:

> Business Park should be encouraged to maintain beautification process
>
> We need more shade trees
>
> A continuing issue is the row of vegetation along the south side of Global Studios property. These trees were planted to screen the helicopter which is now no longer in use. The vegetation is so thick now that it is affecting sunlight to all of the properties nearby.
>
> I have trees directly behind my fence. Kids congregate there where they can't be seen.

A number of comments were made about encouraging back the birds. This shows a concern for the values of the open landscape that extends beyond simply a visual appreciation of the open areas and trees.

> Encourage back the birds. A better island refuge for them to nest as they now travel a long way to hatch their chicks.
>
> Also the issue related to the environmental protection of native birds must be addressed, the area surrounding Tally Ho is home to many native birds, including lorikeets, galahs, sulphur crested cockatoos, bell mynahs, wood ducks, mountain ducks and many other native water birds. Three stand out as being even more important, it is a winter feeding ground for the rare Gang Gang cockatoo, home to the powerful owl and a feeding ground for the migrating straw neck ibis. Developments should be made to take these into consideration.

Other participants were concerned about the lake:

> The lakes are beautiful, but poorly maintained and a serious health risk.

2.2 Built form

Height

There was a general preference for lower rise buildings that sat in the landscape rather than building dominating places.

> Do not let development height exceed current heights. Should be set down so no discussion can be entered into.
>
> Living here doesn't mean I want to see highrise. Working here – it's not ugly for commercial within residential .
>
> It's ugly to see buildings poking up. Seeing trees on the skyline is attractive. Buildings shouldn't overshadow or look out of place with the trees.

There was some discussion about the potential redevelopment of the Burvale and its surrounding car park. The potential for development of the hotel itself was discussed in relation to whether a more dominant built form was appropriate given a tradition in Victoria for hotels to be larger and more ornate than surrounding development. Participants made the following observations:

> Modern buildings need the space around them.
>
> You can't build ornate pubs like that now-a-days because of the cost.

The MYOB building was referred to as an attractive building in a landscape setting, suggesting this as a potential model for part of the Burvale site. There was no support for development of buildings taller than those already in the study area.

There were also concerns about amenity impacts (particularly overlooking) from any development on the area around the Burvale.

Building style

The discussion on building style showed that people generally valued harmony, and development in context, but the interpretation of this context varied between participants. For some context was the physical character of the surrounding area, for others it was a broader context of the landscape and environmental sustainability:

> I think we should be looking for harmony. Difference, but not standing out.
>
> Different areas have different looks. You need to integrate and complement – for example by using brick veneer.
>
> Can't agree. Should look at something designed for the site and use. Something that is ecologically efficient.
>
> Good design depends on whether you are looking in or out. Looking out you want light, energy efficiency. Looking in you want symmetry, colour, aesthetics.

Some buildings were seen as reasonably well designed – others had few supporters.

> The MYOB building looks okay.
>
> Revamp Burvale Hotel and link it to Tally Ho Business Park & surrounds

Building quality

A concern with some newer residential development was not so much its style but its apparent lack of quality:

> The houses look like they've been churned out a sausage machine.
>
> I'm horrified by places that don't have eaves.
>
> Bigger buildings typically look cheap.

2.3 Car parking

Car parking for businesses is seen to be a problem by some participants:

> I do not like the [Business Park] area because of the number of businesses and on street parking on Lakeside Drive and other roads.

There were also concerns about parking in some residential streets:

> Parking at the end of Pickford Street reduces road width to one car wide. To those unsuspecting drivers the road has a very nasty bend right beside a playground. Block the street off and not have it as a through road for the safety of the local residents.

There were concerns that the intensity of development in the Business Park should not be increased without a substantial increase in car parking; however there was belief that this would not be economically or physically possible.

> Can't increase density without a lot more car parking.
>
> If you build on the other side you need much more car parking. It's uneconomic for the developers.

2.4 Traffic

There are concerns about local traffic issues as well as broader traffic issues:

> The amount of traffic is chaotic
>
> There needs to be a speed hump in the Business Park. Traffic flows too fast after entering from Burwood Highway.

Some submitters had very specific suggestions:

> Extend the left turn slip lane out of Lakeside Drive at the Burwood Highway.
>
> Reduce lengths of on-street parking in Lakeside Drive and other roads especially around the curved sections.
>
> Reduce speed limit in the Business Park area to 40 km/h.
>
> Paint double lines on the roads around their curved sections to prevent overtaking by poor drivers.
>
> No more drivers in Pickford Street.

Health

The health impacts from car fumes was raised a number of times. Setting footpaths back from the road was suggested as a way of addressing this.

2.5 Public transport

Public transport services, particularly local buses were reported as poor:

> It takes me 30 minutes to get to the station by the bus, but only another 20 minutes by train to the city. It's seven minutes to the station if I drive.

The difficulty of getting across Springvale Road to some of the bus stops was also raised:

> I gave up on that bus stop.

There was general support for the tram extension.

2.6 Cycling and walking

People enjoyed the open landscaped nature of the study area and as a place to walk and cycle. Any actions aimed at improving the area for walking and cycling were generally seen as good.

Walking

There were mixed views on how pedestrian friendly the open space areas and street network were. Some participants were clear that the area needed to be improved:

> The open spaces of the East Burwood Reserve and the Business Park work well. We regularly visit these areas on foot.
>
> Make whole area more pedestrian friendly
>
> The parks? Fabulous … no disagreement … but it's not easy just to wander.

The current street pattern means that while some houses may be located close to open space, it can be quite some distance to walk there.

> I live in Trainor Place. I have to drive 1.4 km/h around to get to the park. There used to be a way to walk through, but it was blocked by development. I'd use the park more if I could get there on foot.
>
> One thing I dislike is the lack of pedestrian links to the park
>
> Tally Ho Greens had walk through to East Burwood reserve. It was blocked by that development.

The effect of gated communities on walkability was also discussed. People were not opposed to small enclaves but were concerned when larger development blocked people's ability to walk places:

> … not too big because it blocks access.
>
> Make sure that you can walk through. People in higher density still want to walk around their area.

As well as the street pattern being a problem for pedestrians the major roads were also identified as barriers.

> Major roads act as barriers for pedestrians. Lack of crossings. Grade separation required!
>
> I would like to see a pedestrian crossing in Highbury Road between Blackburn and Springvale Roads. It's difficult to cross in busy times.
>
> Footpath extended to Springvale Road-Highbury Road to Vision Drive-west side
>
> Review intersection of Springvale & Burwood Highway (possible tunnels)

Poor connections between Vision Drive and the Business Park were also a frustration for would-be walkers.

> From the World Vision car park to MYOB car park – you could walk, but they closed it off.
>
> If I could walk through there I would walk. … I have had a look at it and there is space for steps on the left hand side of the car park. Nothing's impossible.

As well as visiting the open space on foot people also walk to the Burvale – though the access is not always straightforward

> Yes. We just jump the fence and walk over.
>
> But you can have eight or ten houses specially built where they don't block off access.

The pipe track was recognised as a potential walking route:

> School children walk it at the moment. There are houses backing onto it. It would be a good idea to improve it.
>
> A bike and walking track from High Street Syndal along the 'Melbourne water' pipe track would provide safe access and encourage walking and cycling.

Part of suggested improvements related to improving the sense of safety and security of the area by improving visibility and casual surveillance of the area, or including lights for night time use.

There have been improvements in the area by constructing footpaths along Springvale Road but they have been located near the vehicles, not near the buildings:

> It's the wrong place for it against the road. It's an 80 [km/h] zone, heavy traffic, big trucks, I'm fearful when I walk my eight year old daughter along there. There's a risk of cars mounting the footpath.
>
> The footpath was an afterthought.
>
> People should NOT be cycling/ walking next to cars.

There was seen to be a need to extend and improve these footpaths.

> The footpaths on Springvale Road (next to Crossway Church going up hill) and Burwood Highway (near Lakeside Drive) are incomplete in sections – can they be made?

Cycling

There was support for improving the connectivity for bicycles in the area with a number of suggestions, including:

> It would be nice to have a bike path linking the lake area to north of Burwood Highway.

There was support for bike paths along Highbury Road east of Springvale Road and support for these to be extended along Highbury road to the west of Springvale Road.

2.7 Open space

The open space area of Burwood East Reserve was greatly appreciated by people who used the facilities and the upgrades that Council had made were generally well accepted. There was some disagreement about whether the Reserve catered well for casual users or passive recreation:

> Unless you are actually there to use one of the sporting facilities, there is not much to attract people to linger.
>
> More seats and shade over them are needed.
>
> Burwood East Reserve could have bench seats provided which would become a more relaxed area …
>
> Not enough trees or chairs to enjoy lunch.

Linking parks in the area was raised by a number of participants. Others felt that new open space areas were needed:

> Council should especially purchase land to link the smaller parks in this Tally Ho precinct so that useable parks become available to residents and users of the Tally Ho commercial site (yes during the day many of the workers from Tally Ho businesses use the streets to walk and exercise as there are no parklands linking all the smaller parks).
>
> More parkland should be provided to the north of Burwood Highway. This is more important now with the proposed development of Global studios.

Dog walking was raised by a number of participants with one participant observing that:

> It's a hike to an off-leash dog park.

There were a few negative comments about the maintenance of open spaces in the area but the general view of participants was that open space was well maintained.

2.8 Mix of uses

There was a general view that the Tally Ho Business Park and adjoining commercial uses worked well with the surrounding residential area:

> Business and residential seem to live in harmony.
>
> A safe & friendly area to live; however, weekends are pretty dead.

However,

there were some concerns over the Global Television site:

> Some of these [concerns] are excessive noise of equipment, lack of maintenance of vegetation around the perimeter and not controlling vermin on the property.

Services

There was no desire to see any more shops in the study area, though there were some comments about the need for improved services for workers. The general view was that the area is well served if you are prepared to drive a short distance.

Cafes

The cafes that serve the workers are also used by the residents. From a resident's point of view there was concern that more activity in the area might bring more traffic.

3. Conclusions

One participant's email tried to capture the issues facing the area:

> There are subjective elements and environmental imperatives here that need to be considered.
>
> The subjective elements, usually expressed through a distaste for high-rise buildings especially on smaller blocks of land in proximity to low density housing, often coalesce from imagined and family dimensions. These personal feelings should not be overridden lightly, but nor should they be allowed to go unchallenged by professional analysis, whether environmental, architectural or social.

> The environmental dimensions now mean that modifications to the way most houses in the past have been built - and certainly for most built in the last decade or so - will have to occur. But not so as to reduce garden bio-diversity, food production, space for composting, water storage facility, house shading, etc.

Another participant summed up what many participants probably feel:

> We like the suburb as it is now. We know we have to grow and change a bit. But we want to keep the special ambience.

Meeting the demands of being an activity centre while keeping the area's ambience is the challenge for planning for the area.

Key points for the development of the urban design framework

Built form

- areas developed as 'buildings in grounds' – that is building in an open landscaped setting – either suburban houses surrounded by gardens or commercial buildings in a landscaped setting
- buildings that fit the topography and do not dominate skylines
- no support for high rise buildings
- design that responds to the site and environmental imperatives and complements existing buildings
- concerns about increased density in the area

Traffic and access

- walking and cycling access improved, by overcoming barriers and improving the pedestrian environment and network connectivity
- current traffic congestion and lack of parking
- Poor public transport services

Land use

- no significant amounts of new retail floor space
- existing hotel and restaurants used and valued by local residents

Public spaces

- existing open spaces highly valued.
- better linking of open space areas and development of the pipe track

Environment

- role of open space in supporting bird life and the natural environment

Social issues

- housing that addresses a diverse range of age types and supports families

COMMUNITY FEEDBACK TO THE EXHIBITION DRAFT OF THE URBAN DESIGN FRAMEWORK (OCTOBER 2006)

The table below collates the written feedback on the exhibition draft of the UDF into key themes. Some comments have been combined or summarised, but care has been taken to preserve original phrases and sentiments.

THEME 1 – INTERSECTION OF WEEDEN DVE/VISION DVE/SPRINGVALE RD

Submissions
• Concerned at the level of safety for cars and pedestrians at the intersection. The submitter recommends traffic lights and pedestrian signals would alleviate the problem. (#2)
• Recommends traffic lights at the intersection. (#13) (#19)
• Concerned at the level of safety at the intersection. (#17) (#19)
• Concerned at the waiting time for cars to exit Weeden Dve into Springvale Rd. (#17)
• The submitter does not want a roundabout but suggests detailed traffic analysis be carried out when the technology park is developed further to result in a safe, user friendly system at the intersection. (#17)
• Supports improving the Weeden Dve / Springvale Rd intersection. (#21)

THEME 2 – INTERSECTION OF BURWOOD HWY/MAHONEYS RD

Submissions
• The submitter requests traffic lights to improve access and safety. (#6) (#13)
• Opposes traffic lights at intersection, which will increase traffic in Mahoneys Road. (#19)

THEME 3 – GENERAL TRAFFIC MANAGEMENT

Submissions
• The submitter is concerned over traffic management in Pickford Street, noting the blind corner near Pickford Paddock North. The submitter suggests a road block. (#4)
• The submitter is concerned over traffic management and volumes in Mahoneys Rd as well as Hawthorn Rd. (#4) (#19)
• The submitter is supportive of potential development but requests careful traffic management. (#4)
• Concerned about increased traffic from the proposed developments around the Springvale Rd / Burwood Hwy intersection on an already overloaded road system. (#19)
• Additional traffic lights will impede traffic flow. (#19)
• Opposes egress from the business park via the basketball stadium car park. (#19)
• Keep the one-way access road in the Reserve. (#19)
• The submitter comments that no estimates of additional vehicle trips to be generated by the total future development are given. (#12)
• Lack of examination of traffic impacts of proposals. (#19)

THEME 4 – CAR PARKING

Submission
• Concerned about the impact of removal or limitation of car parking [within the business park] on parking at East Burwood Reserve, which is already heavily used by the sports facilities. Most Reserve users need to travel by car. (#19)
• Implementation of paid parking will not be successful. (#19)
• The submitter believes that Pay Parking at the Business Park has fringe benefit tax implications that may make leasing in the Park less attractive. But does believe it's a positive proposal overall. (8)
• Discourage use of the Reserve car parking by business park employees. (#19)

THEME 5 – CYCLING AND CYCLING PATHS

Submission
• The submitter is supportive of bike paths that link all local schools. (#4)
• The submitter suggests a longer light cycle for slow cyclists at Lakeside Dve/Burwood Hwy. (#8)
• Believes Mahoneys Rd could be made more cycle friendly. (#8)

THEME 6 – PEDESTRIAN PATHS AND LINKS

Submission
• The submitter advocates for a pedestrian link to be created between Highbury Rd and East Burwood Reserve, suggesting the link be located through the Optus site at the end of Vision Dve. (#5)
• The submitter requests pedestrian lights across Highbury Rd, between Blackburn and Springvale Rd, near Newhaven Rd. The submitter suggests this would connect Monash residents with East Burwood Reserve. (#15)
• Queries the benefit of more bike / pedestrian paths, given the danger presented by the surrounding arterial road system and unreliable public transport system. (#19)
• Any bike / pedestrian paths should be gravel or asphalt, not concrete. (#19)
• Suggests pedestrian lights across Burwood Highway. (#19)

THEME 7 – PUBLIC TRANSPORT

Submission
• The submitter wants the tram stops improved. (#6)
• The submitter is interested in the possibility of Springvale Rd/Burwood Hwy becoming a transport interchange. (#7)
• The submitter would like park+ride facilities considered at the Vermont Sth or Tally Ho tram stops. The submitter notes that changing from tram to bus takes more time. (#18)
• Supports bus and tram stops that service the Reserve. (#19)

THEME 8 – DEVELOPMENT OF THE BURVALE HOTEL SITE

Submission
• The submitter is concerned at the level of development encouraged. (#1) (#7)
• Believes a new shopping centre is not required due to proximity to existing centres. (#1)
• The submitter does not agree that shops or restaurants are needed at the Burvale site. Concerned that they will take business away from nearby shopping centres such as Vermont South. (#18)
• A shopping complex on the Burvale site is unnecessary and will exacerbate traffic (#19)
• The submitter believes a shopping centre on the site is positive provided sufficient carparking is provided. (#6)
• Believes a new hotel and entertainment area is acceptable with a maximum of two storeys.
• Supports integration of development on 397 Burwood Hwy with the broader [Burvale] site in the longer term. (#20)

THEME 9 – DEVELOPMENT AND LAND USE GENERAL

Submission
• The submitter believes the development being encouraged by the UDF is excessive and is only for commercial interests. (#3)
• The submitter believes that the Technology Park is driving the push for development but thinks a lunchtime walk to existing shops should be advocated for healthy living. (#18)
• Supports consolidation of sports buildings. (#19)
• Opposes a new built form at the Reserve entrances – unnecessary (#19)
• Supports rezoning of the site at 397 Burwood Hwy to Business 1 Zone (#20)
• Supports the mix of uses proposed in the Draft UDF (#20)

THEME 10 – BUILDING HEIGHTS

Submission
• The submitter wants multi-storied building heights regulated. (#6)
• The submitter is concerned that future housing development will be ‘high rise’. (9)

THEME 11 – OPEN SPACE

Submission
• The submitter is concerned at the loss of open space. They want at least 20% open space on development sites. (#3)
• The submitter requests a half basketball court at East Burwood Reserve. (#15)

THEME 12 – LANDSCAPING

Submission
• The submitter requests tree planting between Springvale Rd and service roads. (#10)
• The submitter requests more trees be planted along Springvale Rd on nature strips and medium strips, between Hawthorn Rd and Burwood Hwy. (#11)
• Landscaping on both sides of Springvale Road should be enhanced, not just the west / business park side, to create a consistent landscape along the road. (#21)
• The submitter requests that existing trees and vegetation in the area are retained. (#14)
• Concerned about the impact of development on birds and trees. Ensure that trees removed are replaced to maintain continuous habitat for birds and to protect visual amenity. (#19)

THEME 13 – MISCELLANEOUS

Submission
• The submitter requests a Post Box at the Business Park (notes that Post Office has previously refused the request). (#8)
• The submitter wants Council to insist that new buildings use rainwater tanks for toilets. (#8)
• The submitter is concerned at the health effects on the residential area surrounding the Optus Telecommunications site. (#16)
• The submitter is satisfied that the Crossway Master Plan will not adversely affect the area, apart from traffic. (#18)

Note:
1. Comments were also received from the Department of Infrastructure (DOI). These were mainly editorial suggestions, as well as a suggestion to include a Wayfinding and Signage Policy in the Implementation Plan, carry out trip pattern analysis and further emphasise Green Travel Plans.

2. Following a late request, discussions were held with the owners of the Global TV site in February / March 2007. The owners sought to clarify the proposed principles for the site, specifically to more clearly show the whole of the Global TV site as having potential for future development, most likely as medium density residential. The need for retention of significant vegetation within the site in its future development was also discussed. Refer Council Report dated 16 April 2007, adopting the Urban Design Framework.