

# Knox Central Structure Plan

DRAFT FOR PUBLIC EXHIBITION (FOR CONSIDERATION BY COUNCIL 13 SEPTEMBER 2016)

*'Knox Central – Capital of the East'*



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# CONTENTS

- INTRODUCING KNOX CENTRAL..... 1
- THE SETTING..... 2
- THE STRUCTURE PLAN..... 6
- VISION AND STRATEGIC OBJECTIVES ..... 10
- THE STRATEGIC RESPONSE ..... 14
- PRECINCT PLAN..... 31
- PRECINCT OBJECTIVES and VISION ..... 32
- BUILT FORM GUIDELINES ..... 33
- BUILT FORM FRAMEWORK – PREFERRED BUILDING HEIGHTS..... 45
- BUILT FORM FRAMEWORK – PREFERRED SETBACKS ..... 46
- IMPLEMENTATION ..... 51
- APPENDIX A ..... 53

# INTRODUCING KNOX CENTRAL

Knox Central is Knox's largest activity centre and sits alongside the City's other major centres of Bayswater, Boronia and Rowville. Knox Central serves a broad cross-section of the community, both within Knox itself and across the eastern suburbs of Melbourne. It includes retail, residential, industrial, commercial, government-owned land and open space. Knox Central's location and boundary are shown in Figure 1.

Knox City Council has long had aspirations for Knox Central, with the *Knox Central Urban Design Framework 2005* providing high level directions for the activity centre for the last 10 years. It has taken some time to gather momentum, but the time is now right for Council to turn its focus actively toward Knox Central for a number of reasons:

- *We have started to see tangible, visible changes in Knox Central. Developments such as Kubix and Villa Maria signal increased investment and development in the area.*
- *Demand for new types of housing in Knox is evident. While the main type of housing is still the detached family home, there has been a shift in types of new housing being built over the last five years.*
- *The market for higher density housing across outer suburban Melbourne has grown and this is increasingly the case in Knox. Knox Central is well-placed to respond this market shift, with large areas of underutilised land.*
- *In 2015, Council adopted the Knox Housing Strategy which designates Knox Central as an area that will accommodate higher density housing. Focusing higher density residential development in major centres, such as Knox Central, supports Council's desire to maintain the low scale character of Knox's suburban streets.*
- *Infrastructure has improved. Most notably, Eastlink better connects Knox with the broader Melbourne metropolitan area. This brings Knox residents closer to jobs in the city, and supports more opportunities for local employment.*

- *The approval of a significant expansion of Westfield Knox represents significant private sector investment in the activity centre.*

Council can improve outcomes and benefits for the community by timing and leveraging its own investment and focus to take advantage of this significant private and infrastructure investment. There is an opportunity to shape the future of the activity centre and to create a sense of place and a central focus for people in Knox and beyond.

Some of the outcomes that Council wants to see for Knox Central are:

- *Improved civic and public spaces and places which allow for more active use by the community.*
- *A distinctive built and natural environment which creates a sense of arrival at 'Knox's CBD'.*
- *Rejuvenation of Lewis Park and Blind Creek. Open space becomes more precious as our suburbs become more intense. 'Unlocking' green open spaces and better integrating them with their surrounds provides increasingly valuable and far greater access for the community.*
- *Increased private and public sector investment, including more diverse housing options, more employment opportunities, and transport infrastructure improvements including the extension of the Route 75 Tram from Vermont South to Knox Central.*
- *Investment that provides maximum benefit to the community – particularly by making Knox Central more accessible, providing greater amenity, and a greater 'sense of place'.*
- *Greater opportunities for people to live in Knox Central, which is close to shops, transport, leisure activities and open space. In addition to its local amenity, Knox Central provides significant lifestyle opportunities due its proximity to the Dandenongs, and its easy access to the Mornington Peninsula and the Yarra Valley.*

The strategic position of Knox Central and the high level direction for its role and function are still sound, but require some adjustment to reflect contemporary conditions. This Structure Plan responds to current conditions and sets out Council's aspirations for Knox Central for the next 20 years.

The Knox Central Structure Plan is an enabling document, which seeks to facilitate significant change with the Activity Centre in a way that produces positive outcomes for the Knox and broader communities.

# THE SETTING

Knox Central is large in scale (approximately two kilometers east to west) with the central spine being Burwood Highway, generally between Stud Road and Scoresby Road. Knox Central is characterised by a broad mix of land uses and activities which are shown in Figure 2.

Knox Central contains significant open space and natural assets and enjoys selected long range views to the Dandenong Ranges.

## Built Environment

Buildings within Knox Central are a mix of low scale buildings and more significant developments. Westfield Knox is a significant presence within the Activity Centre. At-grade carparks currently form a major part of the form of this site when viewed from the public realm.

In recent years, large scale residential developments have occurred on Burwood Highway and Stud Road, however they have not necessarily made a positive contribution to the public realm.

## Business Mix and Employment

Business in Knox Central is dominated by retail. However it also has a unique position within Melbourne's Eastern Region, also encompassing a more significant manufacturing and wholesaling presence than other activity centres. Existing industry clusters in Knox Central include retailing, entertainment and hospitality; automotive services; furniture and flooring manufacturers and wholesalers; higher value manufacturing and scientific services; indoor recreation and construction.

Knox Central, particularly Westfield Knox, is the focus of significant social interaction for people in Knox and the Eastern Region, and is the main location of Knox's 'night time economy'.

## Open Space and Recreation

Knox Central has several significant open space and recreational assets, including:

- Lewis Park
- Blind Creek Corridor
- Collier Reserve
- Gateshead Reserve
- Knox Community Garden/vineyard site

Lewis Park comprises three sporting ovals; a sporting pavilion; a small playground; a small skate park; and part of the Blind Creek Trail shared path.

## Natural Environment and Landscape

Knox Central has a significant role to play in terms of improving biodiversity outcomes, and the associated environmental and social benefits that this brings. The Activity Centre forms part of a habitat corridor from the Dandenong Ranges to the Dandenong Valley. Knox Central has a number of identified sites of biological significance associated with Lewis Park, the Blind Creek corridor and nearby areas.

Blind Creek and Lewis Park are significant water assets within the Activity Centre, which are currently underutilised. The Lewis Park retarding basin plays an important stormwater management role within the local and broader catchment area.

Knox Central offers long range views to the Dandenong Ranges from a number of vantage points.

## Access, Movement and Transport

The main roads within Knox Central, particularly Burwood Highway, represent significant barriers for pedestrians. However, the shared path network within Knox Central provides opportunities for walking and cycling off-road. The Blind Creek Trail bisects the length of Knox Central and provides an east-west shared path through the activity centre.

Buses provide the sole form of public transport available within and to Knox Central. A significant bus interchange is located at Westfield Knox. The closest train stations are Bayswater, Boronia and Ringwood, which are linked by bus services to Knox Central.

Parking is not currently a significant issue in Knox Central. However, at-grade car parks are highly visible particularly from Burwood Highway. This results in a poor urban design outcome and compromised pedestrian amenity.

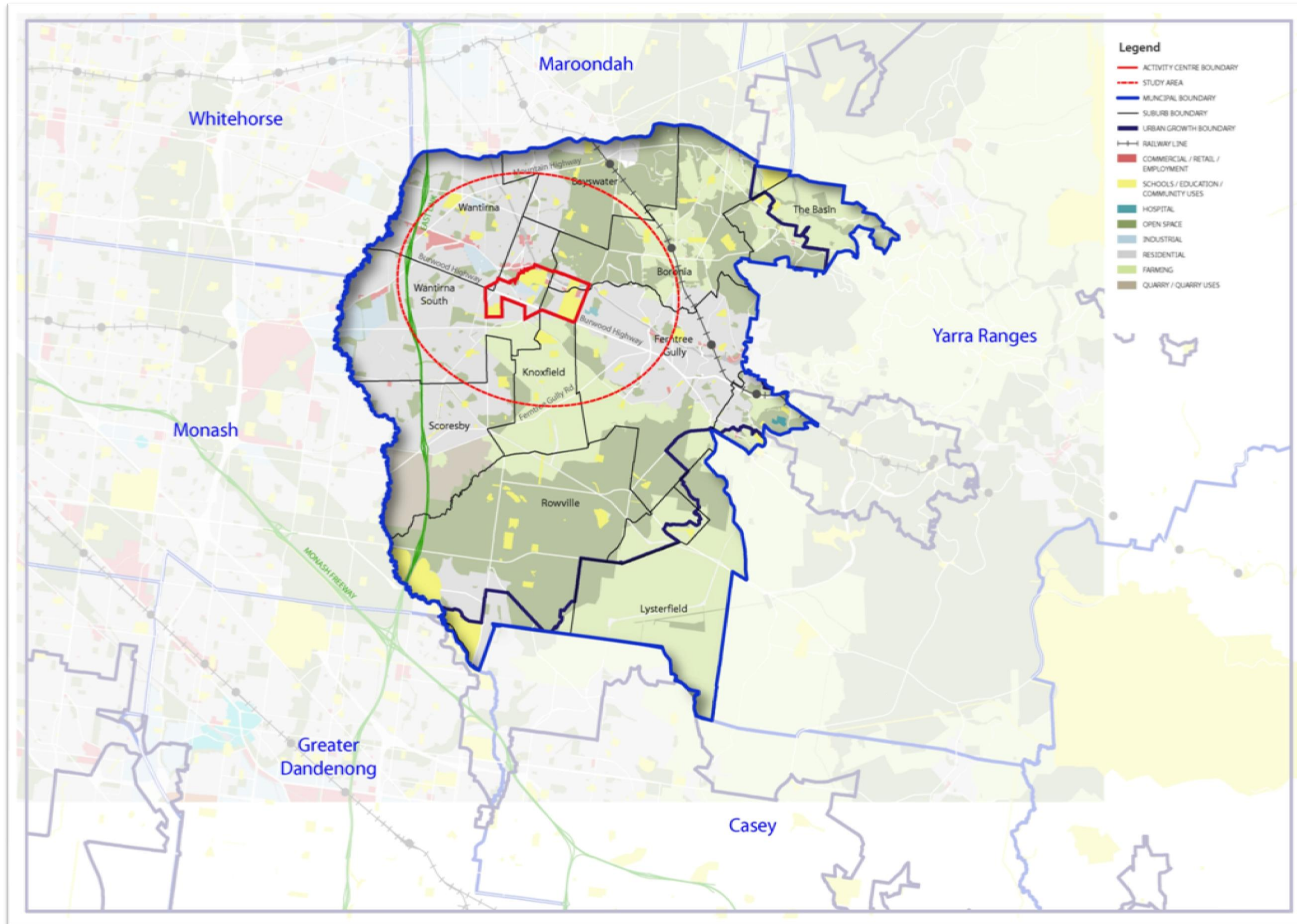


Figure1 Knox Central Activity Centre in the Knox context - boundary shown in solid red outline

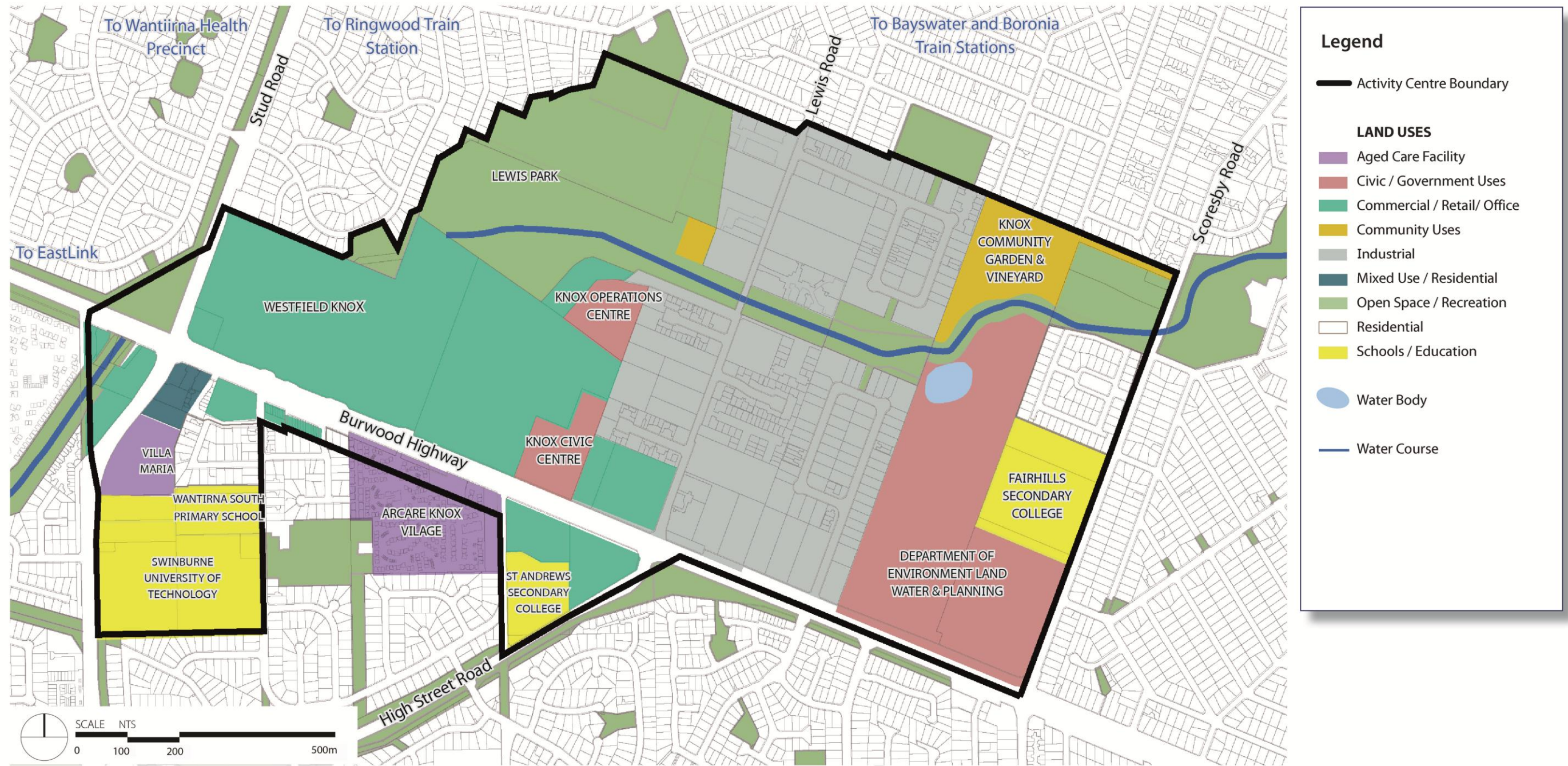


Figure 2 Knox Central Activity Centre - existing land uses



Figure 3 View looking east towards the Dandenong Ranges



# THE STRUCTURE PLAN

The Knox Central Structure Plan (The Structure Plan) sets the framework for future land use, development and improvements in Knox Central, including recommendations for built form direction.

The Structure Plan is guided by a vision that aims to support the development of a vibrant and well serviced Knox Central, capturing the opportunities for business and growth, while responding to the area's unique natural setting.

The Structure Plan is a strategic planning tool to manage, influence and facilitate change in Knox Central and to assist Council in decision making. It is an enabling document, which seeks to facilitate significant change within the Activity Centre in a way that produces positive outcomes for the Knox and broader communities.

The Structure Plan:

- is informed by research and a contemporary evidence base;
- forms part of Council's strategic planning framework for the City, recognising Knox Central's role as an area of significant change and growth.
- provides a framework for guiding Council business; developing partnerships with major landholders and service providers (including state government agencies); activating and providing the certainty needed for ongoing improvements in Knox Central;
- directs investment to capture the unique opportunities presented by Knox Central's location and assets;
- provides certainty for the community, landowners and developers by guiding future improvements and development, including planning controls; and
- Delivers the objectives and strategies, outlined as part of the Knox Vision and Knox City Plan 2013-17 at a local level.

The Structure Plan will be used by a range of stakeholders, including:

## **Knox City Council**

- For informing changes to the Knox Planning Scheme, which will guide Council's assessment of planning permit applications in Knox Central;
- For identifying and prioritising future capital works projects for Knox Central;
- For identifying future programs and services required within Knox Central; and
- For advocating and seeking funding for studies and projects within Knox Central.

## **Landowners / Residents / Business Operators / Traders**

- For guiding future improvements and/ or developments on private land; and
- For identifying opportunities to actively participate in the future development and improvement of Knox Central.

## **State Government Agencies** (e.g. Department of Environment, Land, Water and Planning, Melbourne Water, VicRoads, Public Transport Victoria)

- For guiding the management and improvements to state government owned assets and services.

## **Development of the Structure Plan**

The draft Structure Plan for public exhibition has been developed through significant research and analysis, and the testing and development of ideas and scenarios. Key inputs into the development of the Structure Plan are:

### **Review of Knox Central Urban Design Framework 2005**

The *Knox Central Urban Design Framework (KCUDF)* has been the planning framework for Knox Central since its adoption by Council in 2005. Although many of the directions and objectives of the KCUDF remain sound, they require updating and review. For this reason, the development of the Structure Plan took the KCUDF as its starting point. Analysis of the KCUDF forms a significant part of the *Knox Central Key Issues Background Report*.

### **Research**

Extensive analysis and research has been undertaken, commissioned over a number of years. Summary and analysis of the relevant background research, as well as research recently commissioned by Council, is contained in the *Knox Central Key Issues Background Report*.

### **Key Stakeholders and State Agencies**

An opportunity to comment on the content and currency of the *Knox Central Urban Design Framework* was extended to authorities including Bicycle Network Victoria; Environmental Protection Authority Victoria; Melbourne Water; Public Transport Victoria; VicRoads. An invitation was extended to landowners of key sites to discuss their aspirations for their sites and understand future plans.

### **Knox Central Advisory Committee (KCAC)**

The Knox Central Advisory Committee (KCAC), comprising of Councillors and Council staff, have been working for a number of years to progress Council's vision for Knox Central. Consultation with KCAC was an important part of the development of the Structure Plan.

## Strategic Planning Framework

### Knox Vision and City Plan

The Knox Vision provides a shared vision for the future of Knox that will deliver the lifestyle, jobs and industry, health and wellbeing desired by members of the Knox community. The vision is outlined under five themes, each containing a description of the ideal future, and identifying the features that will exist when that future is achieved:

- **Healthy, Connected Communities**
- **Prosperous, Advancing Economy**
- **Vibrant and Sustainable Built and Natural Environments**
- **Culturally Rich and Active Communities**
- **Democratic and Engaged Communities**

These themes are used as indicators to monitor the community's wellbeing and achievement toward the broader Vision for Knox.

The Knox City Plan outlines the barriers, enablers and key strategies for achieving the aspirations for each theme outlined as part of the Knox Vision. These themes have provided a framework for the development of the Knox Central Structure Plan and the vision and strategic objectives contained in this report (refer Sections 3 and 4). The Structure Plan aims to deliver the objectives and strategies contained in Knox Vision and City Plan, at a local level.

### CITY PLAN THEMES:

#### **Healthy, Connected Communities**



Aims to provide a safe community with strong community connections, where learning and volunteering are valued and supported, and the Knox community benefits from good health and wellbeing at all life stages.

#### **Prosperous, Advancing Economy**



Aims to provide a strong local economy that supports business growth, jobs and community wealth and improve local opportunities for people to live, work, learn and play in Knox.

#### **Vibrant and Sustainable Built and Natural Environments**



Aims to ensure the changing needs of a diverse community are supported through planned growth and change in housing and infrastructure that respects built form, natural systems and resource availability. It also aims to ensure biodiversity and places of natural significance, including waterways and open space, are highly valued, protected and enhanced, and infrastructure networks provide transport choice, affordability and connectivity.

#### **Culturally Rich and Active Communities**



Aims to improve the acceptance and valuing of diversity and difference in the Knox community and increase the use of public spaces and infrastructure for the purposes of cultural expression and physical activity.

#### **Democratic and Engaged Communities**



Aims to improve community leadership and participation in Knox and ensure Council is well governed and demonstrates effective leadership.

### Knox Planning Scheme

A comprehensive overview of the current Planning Scheme provisions affecting Knox Central is provided in the *Knox Central Key Issues Background Paper*.

## Opportunities and Considerations

Knox Central offers a number of opportunities and considerations that will influence its future planning and development.

The opportunities and considerations for Knox Central were determined based on extensive research and investigation, including desktop analysis, site visits, specialist reports, and engagement with Council staff. These are summarised in this section.

These opportunities and considerations have been aligned to the five City Plan themes to assist Council in monitoring the community's wellbeing and achievement toward its broader vision for Knox.

### **Healthy, Connected Communities**

- A number of community facilities are located within Knox Central, include the Knox Library, the Knox Youth Information Centre and Headspace.
- Knox Central is a focal point for social engagement within Knox, particularly around Westfield Knox and Knox Ozone.
- Lewis Park provides a significant recreational space, but is physically separated from the rest of Knox Central.
- There are opportunities to improve the experience of pedestrians and encourage neighbourhood design that makes people feel safe both during the day and at night.
- There are a small number of spaces for community groups to gather. There may be opportunities to improve access to spaces for community groups.

### **Prosperous, Advancing Economy**

- State Government planning policy encourages growth and development within activity centres, particularly those adjacent to public transport links such as Knox Central.
- Due to its status within the metropolitan planning

framework, Knox Central may not be the focus of significant State Government investment.

- The mix of land uses, particularly the extent of industrial land within Knox Central, is unique amongst similar activity centres. Commercial and industrial activities provide significant employment and economic activity within Knox Central.
- Recent trends in consumer spending show a significant increase in hospitality spending.
- A number of underutilised sites within Knox Central provide opportunities for greater residential intensification and mixed use development.

### **Vibrant and Sustainable Built and Natural Environments**

- There is an opportunity to create a unique urban form for Burwood Highway, as the central boulevard of Knox Central. Many sites are underdeveloped and therefore have the potential, through development, to contribute to a strong sense of place and character.
- The extent of open space is a distinguishing feature of Knox Central when compared to similar activity centres.
- Parks, environmental reserves and creeks make a significant contribution to Knox Central, however are not a prominent part of the 'identity' of the activity centre and are largely hidden from view.
- Knox Central is a 'car dominated' centre and the only form of public transport is the bus network. There are opportunities to encourage a shift from private vehicles to more sustainable modes of transport including walking, cycling and public transport by improving infrastructure and amenity within Knox Central and advocating to the State Government for public transport improvements.
- Council is seeking to improve the health of

waterways and streams through its Water Sensitive Urban Design (WSUD) and Stormwater Management Strategy. WSUD opportunities should be pursued in future development (public and private) across Knox Central.

- Knox Central has large areas of hard surfaces (car parks, industrial areas) and large areas of green, permeable surfaces. With the anticipated intensification of activity and increased residential densities, there is a need to mitigate the urban heat island effect.

### **Culturally Rich and Active Communities**

- Council has a long held aspiration to develop a significant cultural facility within Knox Central.
- There is some public art located within the open space network. There are opportunities to upgrade and supplement existing public art in open space.
- There may be opportunities to foster public art within gathering spaces on private land, such as Westfield Knox.
- There are opportunities to expand the role of Knox Central in providing arts and cultural activities.

### **Democratic and Engaged Communities**

- As the location of the Knox Civic Centre, Knox Central provides a focus for civic engagement.
- There are opportunities to strengthen the 'civic presence' within Knox Central, particularly through better use of Council's land holdings.

The drivers for change, opportunities and challenges listed in this section, have influenced the vision and strategic objectives outlined in Section 3 of this Structure Plan.



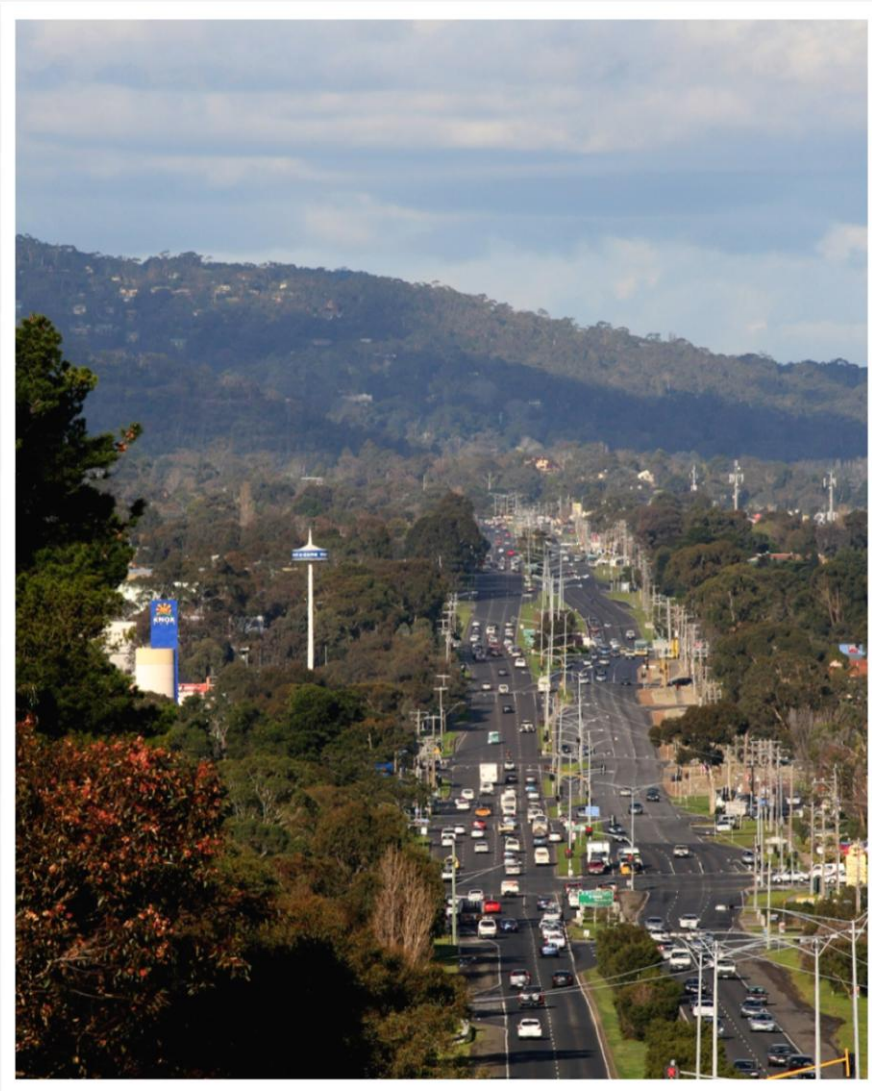
Figure 4 Aerial View of Lewis Park showing poor interfaces with surrounding land uses

# VISION AND STRATEGIC OBJECTIVES

## The Vision for Knox Central

The vision is an aspirational statement of the preferred long term future for Knox Central. The vision is important as it sets out how Knox Central should look, feel and function as it transforms over the next 20 years.

The vision statement represents a contemporary take on Council's long held aspirations for Knox Central and is informed by analysis of key opportunities and challenges for Knox Central undertaken in 2015 and 2016.



## ***Knox Central – Capital of the East***

*Knox Central will be a vibrant modern mixed-use activity centre that attracts residents, workers and visitors from across Melbourne's east. It will be the most well known and popular destination in the east of Melbourne.*

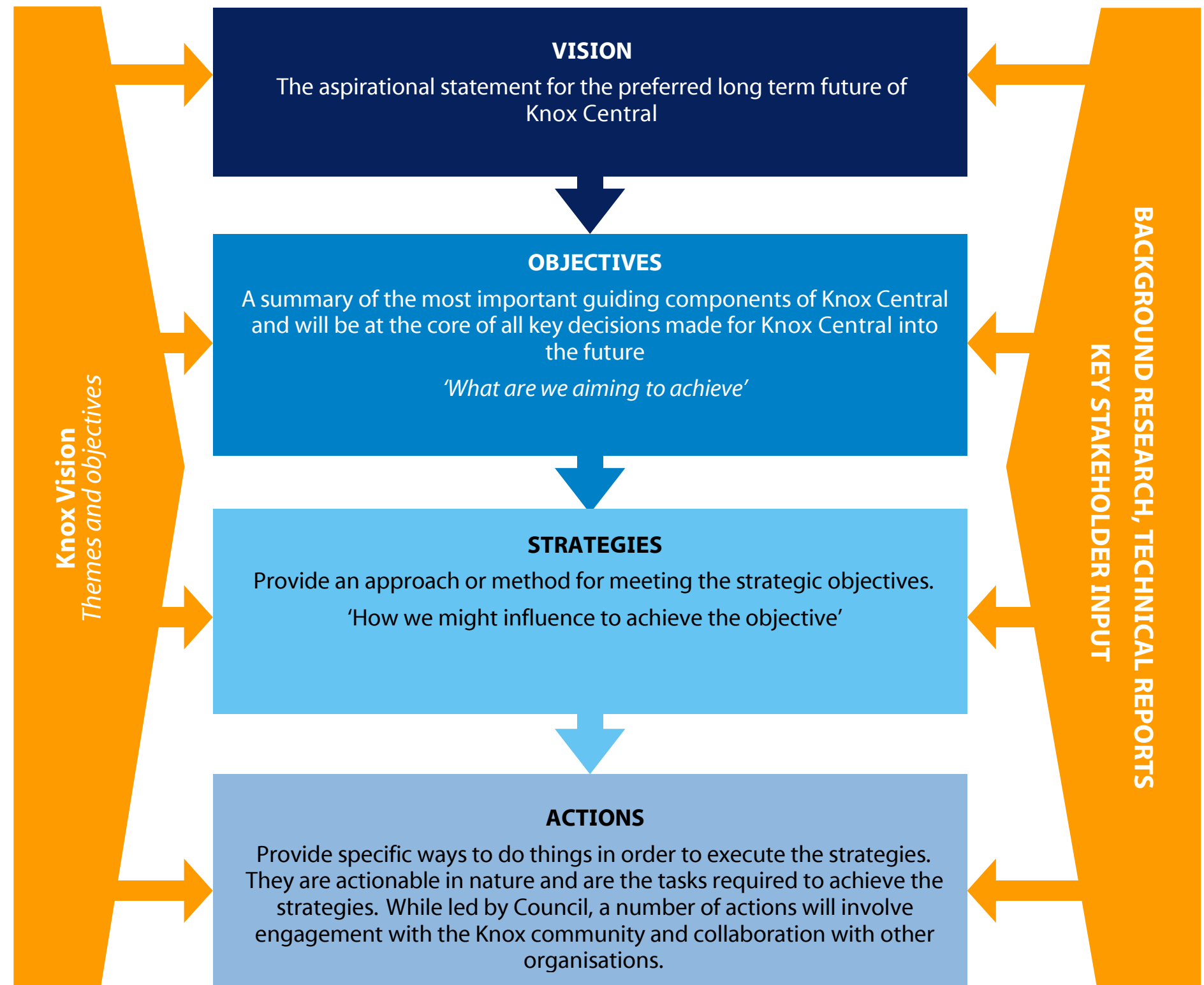
*It will be a busy and attractive urban centre which has a strong connection to the natural environment. It will provide a focus for public life, connecting people and communities, and will be an attractive place to live, work, and play.*

*Knox Central's physical form, encompassing a distinctive boulevard presence along Burwood Highway alongside the well-activated Blind Creek Corridor and Lewis Park, will provide a unique Activity Centre presence in Melbourne's eastern suburbs.*

## Implementing the Vision

In order to achieve the vision for Knox Central, the Structure Plan provides a number of objectives, strategies and actions. They support the vision and provide more 'on the ground outcomes' to be achieved for Knox Central.

The objectives for Knox Central are outlined overleaf. The supporting strategies and actions for each strategic objective are detailed in Section 4 of this Plan.



## Objectives

The Structure Plan provides a set of objectives for Knox Central. They aim to articulate the Knox Vision and Knox City Plan 2013-17 at a local level. The objectives were informed by background research and technical studies undertaken for the Structure Plan.








The objectives are a summary of the most important guiding components of Knox Central. They will be used to direct and assess all future planning and design outcomes within Knox Central to direct future development to be consistent with the Vision for the area.

Table 1 (overleaf) identifies the strategic objectives to guide future outcomes for Knox Central. The five City Plan themes are aligned with the relevant objectives. The table in Appendix A aligns the Structure Plan objectives with the City Plan objectives.

Section 4 aligns the Structure Plan objectives with strategies and actions.

- 1. To enhance Knox Central's role as the civic and public heart of the municipality, where communities connect and congregate.*
- 2. To enable the development of high quality medium and higher density housing that responds to the housing needs of the Knox community, and supports the activity of the centre*
- 3. To establish Knox Central as a focal point of activity including employment, retail, community, entertainment and leisure activity.*
- 4. To capitalise on Knox Central's natural and environmental features to distinguish it from other activity centres.*
- 5. To facilitate an accessible and safe active and public transport network to and within Knox Central*
- 6. To provide an efficient street network that connects key destinations including nodes of activity within Knox Central.*
- 7. To achieve high quality built form and public realm which defines Knox Central as a premier mixed use activity centre.*

Table 1 Structure Plan Objectives

STRUCTURE PLAN OBJECTIVES	CITY PLAN THEME ALIGNMENT
<p><b>OBJECTIVE 1</b> - To enhance Knox Central’s role as the civic and public heart of the municipality, where communities connect and congregate.</p>	
<p><b>OBJECTIVE 2</b> - To enable the development of high quality medium and higher density housing that responds to the housing needs of the Knox community, and supports the activity of the centre.</p>	
<p><b>OBJECTIVE 3</b> - To establish Knox Central as a focal point for activity including employment, education, retail, community, entertainment and leisure activity.</p>	
<p><b>OBJECTIVE 4</b> - To capitalise on Knox Central’s natural and environmental features to distinguish it from other activity centres.</p>	
<p><b>OBJECTIVE 5</b> - To facilitate an accessible and safe active and public transport network to and within Knox Central.</p>	
<p><b>OBJECTIVE 6</b> - To provide an efficient street network that connects key destinations including nodes of activity within Knox Central.</p>	
<p><b>OBJECTIVE 7</b> - To achieve high quality built form and public realm which defines Knox Central as a premier mixed use activity centre.</p>	



# THE STRATEGIC RESPONSE

**OBJECTIVE 1** To enhance Knox Central's role as the civic and public heart of the municipality, where communities connect and congregate.

## CONTEXT AND KEY INFLUENCES

It has long been an aspiration of Council to develop a significant civic/community facility with a focus on arts and culture in the Knox Central.

Council has significant landholdings with Knox Central, many of which are landlocked, fragmented and underutilised in terms of their potential value to the community. One example is Council's Operations Centre, currently located adjacent to Westfield Knox and Lewis Park. Council has recently acquired land in Knoxfield with a view to relocating the Operations Centre to an industrial area, freeing up the Knox Central site for more valuable and accessible civic and community use. It also provides opportunities to create a vibrant interface to Lewis Park.

The Westfield redevelopment (approved in 2014) includes the provision of a temporary tenancy for the Knox Library, close to Knox Ozone. It also includes the provision of a longer term tenancy for the Knox Library, within the newly developed shopping centre, subject to an agreement being reached between Westfield and Knox City Council.

The *Knox Open Space Plan* categorises Lewis Park as 'municipal open space'. Council's land holdings provide opportunities to better use Lewis Park and improve its interfaces with surrounding land.

## STRATEGIES

- Provide integrated civic/community facilities with related entertainment, leisure, recreation and business services around a central public space which integrates with Lewis Park.
- Improve pedestrian and vehicular links between Westfield Knox, Lewis Road and the balance of Knox Central to the east.
- Ensure the municipal/community uses within the civic/community precinct integrate with future expansion of shopping, business and residential uses on the Westfield Knox site and vice versa.
- Create feature building forms to the civic precinct to complement future civic space.
- Provide Civic Buildings that improve physical and visual connections to Lewis Park, so that the outlook and connection to the park is a key feature of the civic/community precinct.
- Provide a highly accessible and visible civic precinct that is pedestrian friendly and a destination point with the Activity Centre.
- Facilitate accessible and safe pedestrian links between public transport nodes and civic/community facilities.
- Incorporate accessible ground level public spaces into the design of civic and related buildings.
- Support civic buildings to function as flexible and multi- purpose cultural/community facilities.
- Provide a new north-south street link to join up Council's landholdings with the future civic precinct.

## ACTIONS

- Continue investigations into the development of appropriate arts and cultural facilities in Knox, within the context of the South/Eastern region.
- Commence the process to acquire land to facilitate Lewis Park frontage for the Civic/Community precinct.
- Develop a master plan for the future civic precinct and Council's land holdings, which includes:
  - Proposed road network and lot layout
  - Building envelopes
  - Indicative land uses
  - Pedestrian and cycle paths
  - Public/civic space
  - Connections to surrounding land uses including Lewis Park
- Following scoping and master planning, undertake the design process for the future civic buildings.
- Investigate innovative options for funding the future Civic Precinct (including partnerships).
- Continue the process of relocating the Knox City Council Operations Centre.
- Undertake the fit-out and relocation of the Knox Library to its temporary location near Knox Ozone.
- Subject to agreement being reached between Westfield and Council, commence the design and fit-out of the long term library tenancy in the redeveloped Westfield site.

## **OBJECTIVE 2** To enable the development of high quality medium and higher density housing that responds to the housing needs of the Knox community, and supports the activity of the centre.

### **CONTEXT AND KEY INFLUENCES**

#### **Housing Diversity and Choice**

The majority of dwellings in Knox are separate houses (86.5% of dwellings in Knox, according to the 2011 Census, compared to 71.1% for greater Melbourne).

It is expected that families with children will continue to be the dominant household type in Knox, however couple-only and one-person households are the fastest growing household types. A greater diversity of housing types, in terms of size, type, affordability and accessibility, is needed in order to respond to the changing needs of Knox's population.

The *Knox Housing Strategy 2015* designates Knox Central as an 'activity area'. These are areas which will:

- see a greater change in housing styles than other areas in Knox;
- balance the retention of the green and leafy character, whilst allowing more intensive development;
- allow more people to live close to everyday and specialised services to support their needs and lifestyle changes; and
- contribute to quality residential design that is well-designed both architecturally and functionally, to enhance the quality of living in Activity Areas in Knox.

As housing affordability continues to be an issue, Council has forecast that an additional 860 social housing dwellings will be needed across Knox by 2036 to meet the requirements of the local community.

#### **Housing Demand and Supply**

There is expected to be demand for up to 2,400 additional apartments across Knox Central by 2035. Demand for townhouses can be considered as 'uncapped' within Knox Central (i.e. supply will be taken up by the market). The areas identified in this Structure Plan for residential and mixed use development are able to accommodate the

anticipated demand for new dwellings within Knox Central (*Geografia, 2015*).

Knox Central has several aged care facilities offering accommodation with a range of levels of care. This forms an important part of the 'housing mix' in Knox Central.

#### **Design Quality and Amenity**

*Better Apartments* design standards and implementation mechanisms, prepared by the Department of Environment, Land, Water and Planning (DELWP) and the Office of the Victorian Government Architect (OVGA), are due for completion in late 2016, and will be incorporated into the Knox Planning Scheme. The draft Design Standards primarily focus on internal amenity concerns such as windows, storage, noise, natural ventilation and access to daylight.

The development of high quality architecture will be essential in achieving change and growth in Knox Central that makes a positive contribution to the community.

### **STRATEGIES**

- Capitalise on sites that are capable of accommodating dwellings in Knox Central.
- Support development that demonstrates high levels of architectural merit and that maximises land use and development potential of sites.
- Support diverse medium to higher density housing choices in Knox Central to accommodate a changing and increasing population.
- Support the development of a high amenity medium density neighbourhood in the northern portion of the strategic redevelopment site at the corner of Burwood Highway and Scoresby Road that is integrated with the Blind Creek corridor, in accordance with the guidance provided in the Structure Plan.

- Support development that provides affordable housing options.
- Support development that provides flexible and accessible housing options, with a high level of internal amenity.
- Support integrated mixed use/ residential development within the Commercial Core precinct, particularly on the frontage to Lewis Park.

### **ACTIONS**

- Develop planning controls to support the development of high quality medium and higher density development in Knox Central.
- Work with the owner of the strategic redevelopment site at the corner of Burwood Highway and Scoresby Road, to achieve positive neighbourhood outcomes including a contribution of 5% of the total housing allotments as social housing (contribution to include dwelling and land), in accordance with the Knox Affordable Housing Action Plan.
- Provide for at least 5% social housing at Council-owned sites that are developed for housing, in accordance with the Knox Affordable Housing Action Plan.
- Continue to grow and develop partnerships with community housing associations, developers and other relevant agencies involved in social housing to achieve social housing outcomes on Strategic Investigation Sites.
- Include residential interfaces as a consideration of the Lewis Park Master Plan.

## **OBJECTIVE 3** To establish Knox Central as a focal point for activity including employment, education, retail, community, entertainment and leisure activity.

### **CONTEXT AND KEY INFLUENCES**

#### **Business Mix, Employment and Education**

Business in Knox Central is dominated by retail however it also has a unique position within Melbourne's Eastern Region, having a manufacturing and wholesaling presence in an activity centre context. However, there is not expected to be future demand for additional industrial and commercial floor space (*Geografia, 2015*).

Existing industry clusters include retailing, entertainment and hospitality; car related services; furniture and flooring manufacturers and wholesalers; higher value manufacturing and scientific services; and construction.

Knox Central is well-served by educational facilities including primary, secondary and tertiary education. The Knox Innovation, Opportunity and Sustainability Centre (KIOSC), based at Swinburne, provides a unique opportunity for creating an interface between education, the community and the economic development of the region.

#### **Leisure and Entertainment**

Knox Ozone is the focus of Knox's 'night time economy' and is the location of social interaction for many Knox residents. There is a lack of diversity in retail/hospitality/leisure spaces across Knox Central.

Lewis Park is a significant community asset which has biodiversity, water, recreational and community values.

#### **Community Facilities and Spaces**

Council has a long held aspiration to develop a significant cultural facility within Knox Central. Council has expressed its commitment to multi-purpose, co-located and integrated community facilities across Knox.

There are a number of highly valued community groups located within Knox Central, including sporting clubs and the Knox Community Garden. Demand for community facilities, infrastructure and

services will increase as the residential population within Knox Central increases. Council's land holdings within Knox Central may provide opportunities for the provision of additional community facilities.

### **STRATEGIES**

- Proactively plan for the community infrastructure needs of existing and future residents, particularly additional demand on services as a result of increased local population.
- Strengthen the role of the significant institutional uses by supporting the ongoing operation and upgrade of educational and aged care services.
- Support the establishment of an arts and culture hub in Knox Central.
- Support the on-going use of the 'Community Gardens/Vineyard' site for appropriate community and complementary activities.
- Support higher density residential development, commercial, entertainment and leisure uses to activate interfaces to Lewis Park and Blind Creek.
- Support the role of Lewis Park as the primary regional open space within Knox, servicing the broader community.
- Support complementary recreational land uses near Lewis Park.
- Facilitate a shift from the industrial nature of the Lewis Road Mixed Use precinct to ground level commercial with upper level residential uses.
- Support the expansion of activity in the Commercial core precinct as the focus for major entertainment, hospitality, retail and leisure in Knox Central.
- Support small scale and complementary retail and hospitality operations outside of the commercial core in order to provide street level activity throughout Knox Central.

- Support ground level commercial with upper level residential uses in the Burwood Highway South precinct.
- Support the provision a mixed use precinct, which includes local convenience retailing, at the strategic redevelopment site at the corner of Burwood Highway and Scoresby Road as part of the site's redevelopment.
- Support the role of Knox Ozone as the focus for Knox's 'night time economy', while managing potential negative impacts such as those associated with excessive alcohol use.

### **ACTIONS**

- Continue to develop the community facilities needs analysis for Knox Central, in accordance with Council's Community Facilities Planning Policy.
- Continue to work with Victoria Police and others to maximise public safety within Knox Central.
- Continue the Knox Liquor Accord to ensure a safe and sustainable night time economy at Knox Central.
- Ensure the ongoing management of the Community Gardens/Vineyard site encourages broad community participating and access.
- Continue to partner with and support KIOSC, as a means of building workforce skills for the future.

## OBJECTIVE 4 To capitalise on Knox Central's natural and environmental features to distinguish it from other activity centres.

### CONTEXT AND KEY INFLUENCES

The extent and proximity of open space within Knox Central is a key distinguishing feature of the activity centre, compared to other activity centres in Melbourne. These areas offer benefits associated with amenity, local identity, recreation, environmental values and health and wellbeing. However, there are barriers to these areas, with most adjoining land uses turning away from open space.

Knox Central has a significant role to play in terms of improving biodiversity outcomes, and the associated environmental and social benefits that this brings. Lewis Park and the Blind Creek Corridor form part of a habitat corridor from the Dandenong Ranges to the Dandenong Valley.

While in the very upper reaches of the catchment Blind Creek retains its natural channel, within Knox Central, it has been piped, realigned and channeled. 'Daylighting' is the term used to describe the process of redirecting a watercourse above ground, from an underground drainage system, and to restore it to its more natural state. This process need not be undertaken for the whole 'stretch' of creek but can be applied in specific locations identified as being appropriate for special treatments and where the greatest environmental benefit can be achieved.

The *Knox Integrated City Strategy* acknowledges the health and wellbeing benefits of the natural environment, with an area of focus for the strategy being to "increase awareness and appreciation of the value of local biodiversity and its community health and wellbeing benefits".

Trees, in particular, provide numerous economic, environmental and social benefits – many of which have been recognised both nationally and internationally.

### STRATEGIES

- Restore the environmental quality of Blind Creek through 'daylighting' and revegetation in strategic locations, to optimise ecological and functional benefits of a natural waterway.

- Conserve the natural environmental qualities and vegetation character of Lewis Park, Blind Creek corridor and Collier Reserve.
- Improve the ecological function of parklands through natural revegetation and wetland formation.
- Establish the Blind Creek corridor as a key attraction for environmental education and community participation.
- Maximise opportunities for community interaction with the natural environment.
- Require the development of the strategic redevelopment site at the corner of Burwood Highway and Scoresby Road to retain and enhance the water body on site in order to facilitate integrated water management and to reinforce its ecological function and provide a high level of neighbourhood amenity.
- Establish a formal boulevard character for Burwood Highway that is a continuous planted setback with a tree canopy and formal landscaping to reflect the role and context of the activity centre and to support active and pedestrian-friendly street frontages and public spaces.
- Support development that addresses and allows for interaction to open space. Avoid development that fails to optimise interfaces to open spaces.

### ACTIONS

- In partnership with Melbourne Water, develop a Master Plan for Lewis Park (and Blind Creek), which may include:
  - A review of the retarding basin capacity of Lewis Park and transferring capacity to other appropriate locations up and down stream.
  - Establishment of a Water Sensitive Urban Design (WSUD) network to manage

- stormwater quality and reuse in Lewis Park.
- Adjustment of the retarding basin levy embankment to enable residential/mixed use edge to Lewis Park.
- Identification of strategic locations for daylighting of Blind Creek.
- Identification of appropriate locations for additional pedestrian bridging points across Blind Creek.
- Identification of recreational needs (new and upgraded).
- Identification of appropriate options for ambient lighting along Blind Creek to encourage safety, activity and events.
- Continue to work closely with the Friends of Blind Creek group and Knox Environment Society.
- Upgrade stormwater management infrastructure to contribute to the amenity and function of open space.
- Promote the *Gardens for Wildlife* program to businesses within the Lewis Park industrial area, body corporate of the new residential developments and residents of new dwellings.
- Encourage corporate environmental and social responsibility in the local business community by providing advice and links to government programs through the Business Visit Program.
- Continue to undertake street planting programs in line with the 'Street Tree Planting to High Profile Roads' framework, including Burwood Highway if the speed limit is reduced to 60km/h (see Objective 5).
- Determine funding options, including development contributions, to deliver and recover the costs associated with capital works improvements and upgrades to Lewis Park and Blind Creek.

# *Lewis Park and the Blind Creek Corridor*

*Lewis Park and the Blind Creek corridor form a significant part of Knox Central, providing an environmental 'spine' through the Activity Centre. Lewis Park, which is a municipal open space, can be viewed through the 'lenses' of biodiversity, connection, culture, economy, leisure, people, play, sustainable, water. As well as being a major recreational facility, Lewis Park which is owned by Melbourne Water, plays a significant role as a retarding basin and is the location of significant vegetation.*

*While in the very upper reaches of its catchment Blind Creek retains its natural channel, by the time the creek reaches Knox Central, it has been piped, realigned and channeled. 'Daylighting', the process of redirecting a watercourse above ground and restoring it to its more natural state, would bring many benefits if undertaken for Blind Creek.*

*Many of the adjoining land uses turn their back on Lewis Park and Blind Creek. Future development adjoining open spaces provides an opportunity to open up this important community and natural asset. In particular, Council's future Civic and Community Precinct will provide a significant new presence to Lewis Park. A master planning project for Lewis Park is on Council's forward program of works.*

*The master plan will involve a substantial body of work undertaken in partnership with Melbourne Water, to balance community and environmental outcomes with the water management requirements of the site. Given the close relationship between Lewis Park and Blind Creek, the scope of the master plan could extend upstream towards Scoresby Road.*



Figure 5 Artist's Impression - future interface to Lewis Park

## OBJECTIVE 5 To facilitate an accessible and safe active and public transport network to and within Knox Central.

### KEY INFLUENCES

#### Public Transport

Knox Central is serviced solely by bus services, with the Westfield Knox operating as the bus interchange for a number of local and more strategic bus services. A number of the bus routes that access the Knox Central study area from local catchments have a very poor frequency and there are significant service gaps in surrounding neighbourhoods.

The extension of the Route 75 tram along Burwood Highway has long been a priority for Council and continues to be the focus of advocacy to the State Government. Recent modelling shows that, while the tram route extension would only result in a small shift from car trips to public transport, it would result in a more significant shift from bus to tram usage. This is significant as trams are less susceptible to on-road delays, particularly where the tram line would be primarily off road as would be the case in this instance. Traffic modelling shows that Burwood Highway will reach capacity for vehicles by 2035, which will result in delays to bus movements, thus making the tram the preferable option.

Previous Council plans including the *Knox Central Urban Design Framework* envisaged the tram alignment along the northern side of Burwood Highway. Recent research indicates that a tram reserve within the central median of Burwood Highway is preferable. This central alignment would maximise opportunities for future extension east along Burwood Highway, and would support the achievement of consistent built form and landscaping outcomes on the north side of Burwood Highway.

#### Active Transport

Burwood Highway is a significant barrier for pedestrians and cyclists, particular due to the short crossing times at signalised intersections. This is a particular concern given the land uses south of Burwood Highway including aged care facilities and schools.

The active transport network primarily comprises shared paths and footpaths, with no on-road bicycle lanes. The Blind Creek trail is a significant part of the shared path network, providing the main east-west link through Knox Central. North-south shared paths are provided along Scoresby Road and Stud Road.

### STRATEGIES

- Prioritise pedestrian and cyclist movements and access to public transport.
- Improve pedestrian and cycle access and safety as identified in *Figure 7 Active Transport Actions*.
- Improve pedestrian connectivity, amenity and safety to and within the Commercial Core.
- Improve the pedestrian amenity, safety and connectivity throughout Knox Central, particularly in relation to Burwood Highway and Stud Road.
- Improve cyclist safety and connectivity throughout Knox Central, particularly in relation to Burwood Highway, and Stud Road.
- Improve access for people with limited mobility throughout Knox Central.
- Provide safe pedestrian and bicycle connections to and within open space, including Lewis Park, Collier Reserve, Gateshead Reserve and the Blind Creek corridor.
- Support development that enhances pedestrian and bicycle accessibility along the Blind Creek corridor.
- Improve the public transport network to and within Knox Central, including service frequency and coverage.
- Support the development of a future tram reserve within the central median of Burwood Highway.

### ACTIONS

- Prepare an 'Integrated Movement and Access Improvements Program' for Knox Central based on the recommendations contained in the *Knox Central Integrated Transport Study (Cardno 2016)* and identify any gaps and priorities for future work.
- Incorporate the priority actions for implementing the 'Integrated Movement and Access Improvements Program' into the capital works program, develop relevant capital works business cases, and determine the funding options to deliver and recover the costs associated with capital works project delivery.
- Lobby Public Transport Victoria to undertake a feasibility study into the Route 75 tram extension along Burwood Highway to Knox Central.
- Continue to lobby Public Transport Victoria to extend the Route 75 tram to Knox Central.
- Lobby Public Transport Victoria for bus frequency and coverage improvements on strategic routes, including connections to neighbouring activity centres including the Wantirna Health Precinct.
- Lobby VicRoads to increase crossing times and automate pedestrian phases at identified signalised intersections on Burwood Highway.
- Lobby to VicRoads to reduce the speed limit along Burwood Highway between Stud Road and High Street Road from 80km/h to 60 km/h in order to improve safety for pedestrians and cyclists crossing the road.
- Lobby Public Transport Victoria and VicRoads to improve bus priority measures at intersections along Burwood Highway and Stud Road accessing the bus interchange within the Commercial Core.
- Undertake audits of the Blind Creek shared path and the Scoresby Road shared path, and identify improvements to enhance access and safety.

## ACTIONS continued

- Implement the recommendations from the Principal Pedestrian Network (PPN) project and shared path audit
- Integrate pedestrian and cycle facilities into new road links within Knox Central.
- Consider on-road bicycle lanes in future reviews of the bicycle network across the municipality of Knox, including Knox Central.
- Support pedestrian connections between Commercial Core and surrounding land uses to the north and east.
- Improve lighting to open space and along pathways, where appropriate.



Figure 6 Burwood Highway is a key public transport route



## Active Transport Actions

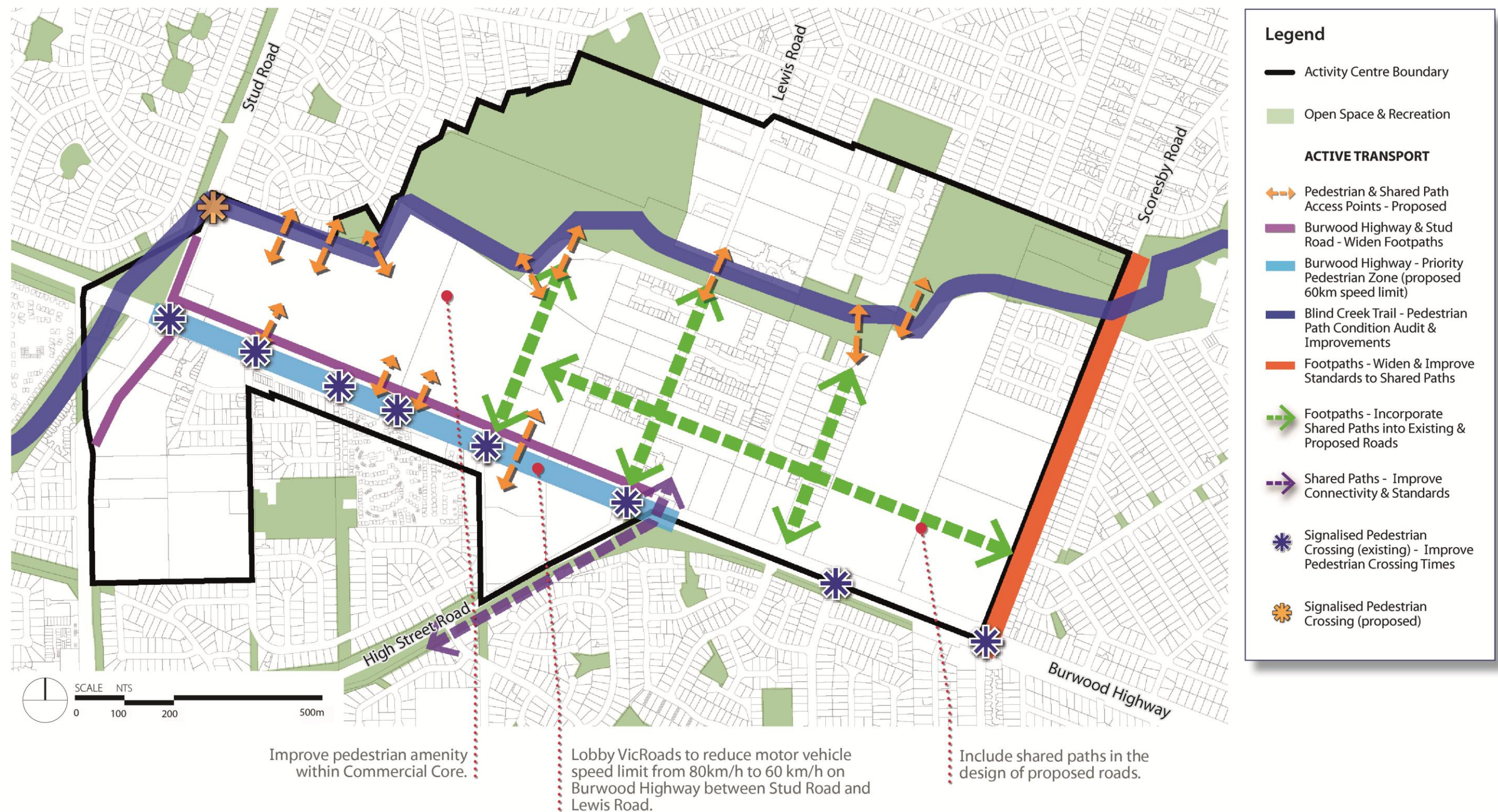


Figure 7 Active Transport Actions – see page 20 for a comprehensive list of actions

## Public Transport Actions



Figure 8 Public Transport Actions – see page 20 for a comprehensive list of actions



*Council will continue to lobby for the extension of the Route 75 Tram to Knox Central.*

Figure 9 Artist's Impression - Future Burwood Highway Conditions

## OBJECTIVE 6 To provide an efficient street network that connects key destinations including nodes of activity within Knox Central

### CONTEXT AND KEY INFLUENCES

There is currently poor connectivity between the various precincts within Knox Central, with Burwood Highway being the only east-west thoroughfare.

#### Road Network

There are a number of arterial roads within Knox Central including Burwood Highway, Stud Road, Scoresby Road and High Street Road. The main local roads within Knox Central are Lewis Road, Tyner Road and Parkhurst Drive.

The VicRoads *SmartRoads Road User Hierarchy* indicates that Burwood Highway and Stud Road are nominated as Bus Priority Routes, as well as Bicycle Priority Routes through the Knox Central. Burwood Highway between the Tyner Road (loop) intersections is also a nominated Pedestrian Priority Route.

The intersections on Burwood Highway within Knox Central study area all currently operate with very poor levels of service resulting in significant queuing of cars during peak times. The Boronia Road / Lewis Road intersection to the north of Knox Central is significantly over capacity. Traffic modelling shows that Burwood Highway will reach capacity for vehicles by 2035.

Improvements to the internal road network will be needed in order to accommodate the future residential population of Knox Central, and to provide better connections within the precincts of Knox Central.

A number of opportunities for traffic management have been identified in the *Knox Central Integrated Transport Study* (Cardno 2016). The two main road interventions are the opening up of access to the Civic Precinct unlocking Council owned land and a new east-west road to link the future neighbourhood at the strategic redevelopment site at the corner of Burwood Highway and Scoresby Road site with the core of activities to the west.

#### Car parking

There are currently few issues associated with car parking within Knox Central. However, as the extent of development and activity within Knox Central increases, car park demand will increase accordingly. A key consideration in the future will be to provide adequate parking to address the additional demand, whilst promoting sustainable means of transport.

#### Road Safety

Statistics show that there is a high concentration of road accidents at intersections along Burwood Highway, including incidents involving pedestrians and cyclists, particularly between High Street Road and Stud Road.

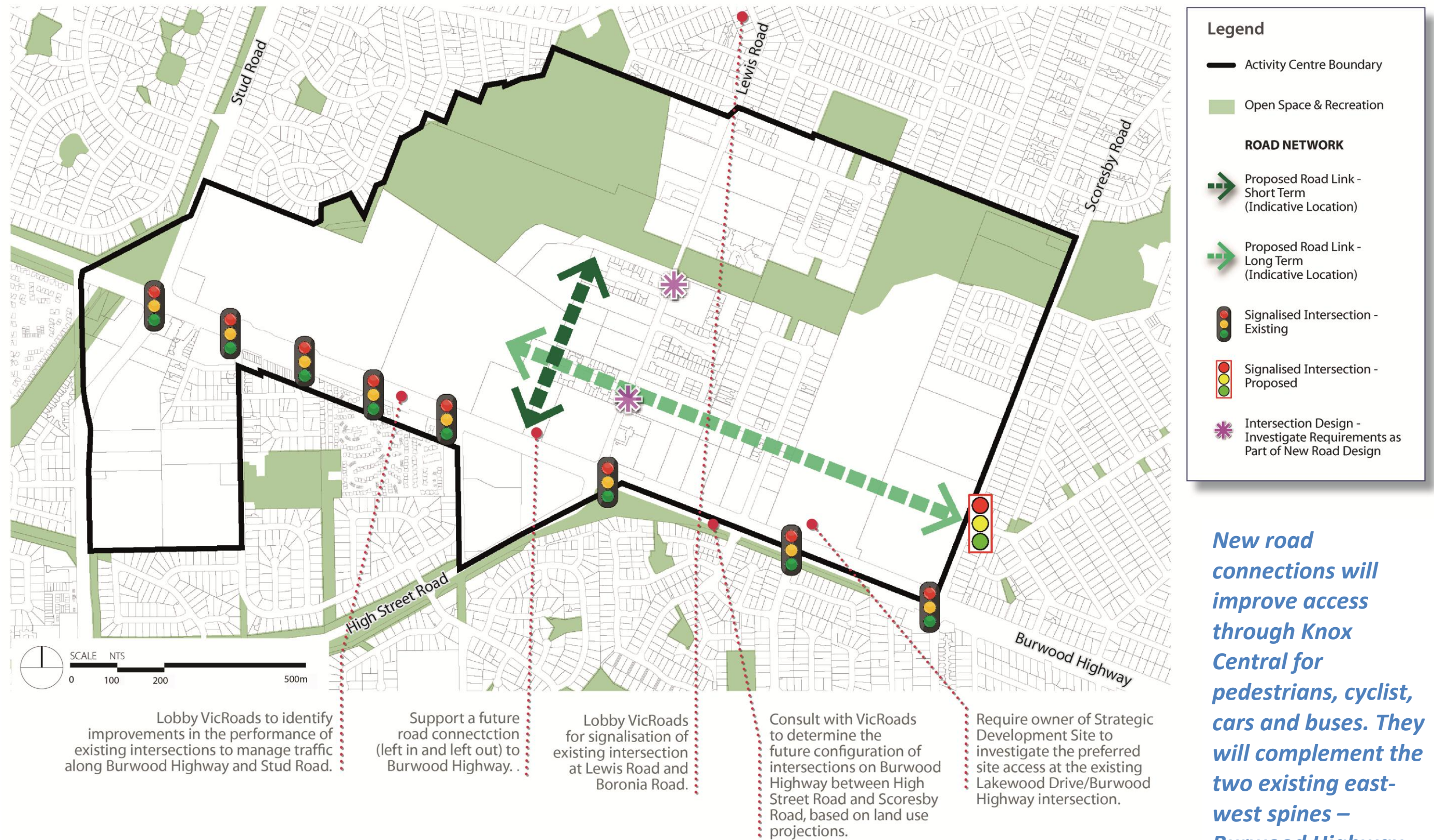
### STRATEGIES

- Upgrade the road network to safely and effectively distribute traffic volumes across Knox Central.
- Facilitate safe vehicular movement and parking as development increases in the Activity Centre.
- Support vehicular links between the Civic/Community precinct and the Commercial Core.
- Support new road links in accordance with *Figure 10 Road Network Actions*.
- Provide north-south vehicular links to optimise access to the Civic/Community precinct, and support the efficient use of underutilised land.
- Support a road link between the Commercial Core to Scoresby Road to facilitate vehicle, pedestrian and cyclist movement, parking, and public transport.

### ACTIONS

- Prepare an 'Integrated Movement and Access Improvements Program' for Knox Central based on the recommendations contained in the *Knox Central Integrated Transport Study* (Cardno 2016) and identify any gaps and priorities for future work.
- Incorporate the priority actions for implementing the 'Integrated Movement and Access Improvements Program' into the capital works program, develop relevant capital works business cases, and determine the funding options, including development contributions, to deliver and recover the costs associated with capital works project delivery.
- Lobby VicRoads for the signalisation of the Boronia Road/Lewis Road intersection
- Lobby VicRoads to undertake intersection timing and phasing analysis at key intersections on Burwood Highway and Stud Road to identify improvements in the performance of the existing intersection arrangements.
- Work with VicRoads to establish appropriate access from Burwood Highway and Scoresby Road to the strategic development site.
- Support additional east-west road access within Knox Central.
- Establish the design and function of the north-south road link as part of the master plan for the future Civic/Community precinct and Council's land holdings.
- Prepare a Precinct Parking Plan for Knox Central in accordance with the requirements of the Knox Integrated Transport Plan to manage parking throughout the Activity Centre as development increases.

## Road Network Actions



*New road connections will improve access through Knox Central for pedestrians, cyclist, cars and buses. They will complement the two existing east-west spines – Burwood Highway and the Blind Creek corridor.*

Figure 10 Road Network Actions – see page 25 for a comprehensive list of actions

## OBJECTIVE 7 To achieve high quality built form and public realm which defines Knox Central as a premier mixed use activity centre.

### KEY INFLUENCES

Buildings within Knox Central have been developed over many decades with the oldest building in the area, the Wantirna South Primary School, dating back to the 1940s. Incremental change, and a diversity of land uses within the activity centre, has contributed to a somewhat inconsistent built form character. This is exacerbated by the variations in the nature and width of the Burwood Highway road reserve.

The vision for Knox Central includes a built form that is more intensive than other areas in Knox. The intensification of buildings within Knox Central presents an opportunity to achieve well-designed buildings of architectural merit in a high profile location.

The creation of a consistent and strong built form presence to Burwood Highway, achieved by building setbacks and street wall heights, will be an important part of building on Knox Central's sense of place. In order to achieve a uniform built form, street setbacks will need to vary in response to the nature of the road reserve. Street setbacks should also support the achievement of a distinctive boulevard character to Burwood Highway.

Good design should not only focus on the architectural style and form of a building, but also on the way the building presents and engages with the adjoining footpath at the ground level. This is particularly the case on Burwood Highway in order to support a more pedestrian friendly streetscape.

In establishing a built form framework for Knox Central that provides a strong sense of place across the entire activity centre, the following influences were considered:

- the built form elements of the *Knox Central Urban Design Framework 2005*;
- forecasted demand for commercial and residential development (*Geografia, 2015*);

- the significant regional role of the Activity Centre;
- development potential and capacity of precincts (*Geografia, 2015*);
- impacts to amenity of adjoining areas and contribution to the public realm (*Hansen, 2016a & 2016b*);
- the context of Knox Central in relation to its significant natural features, open space and the Dandenong Ranges backdrop (*Hansen, 2016a*).

The future public realm within Knox Central will be influenced by a number of major capital works projects proposed in the Structure Plan including the extension of the Route 75 Tram, construction of new roads, the Lewis Park Master Plan and the development of new civic buildings and public spaces.

### STRATEGIES

- Support built form that provides a higher intensity of land use and activity commensurate with the role of Knox Central as the major focal point of the municipality and a premier destination for the outer eastern region of Melbourne.
- Support the development of a strong built form presence to Burwood Highway through the provision of consistent street wall heights and street setbacks which respond to the nature of the road reserve.
- Establish a distinctive boulevard character for Burwood Highway that is a continuous planted setback with a tree canopy and formal landscaping to reflect the role and context of the activity centre and to support active and pedestrian-friendly street frontages and public spaces.

- Support development that demonstrates high levels of architectural merit.
- Support the development of well-designed, high-quality and distinctive 'feature forms' along Burwood Highway.
- Support development that contributes to an active and pedestrian friendly public realm.
- Require development to be of the scale and design consistent with the objectives of the relevant precinct.
- Maximise views to the Dandenong Ranges from public areas within Knox Central.
- Support development that contributes to the activity, safety and amenity of the natural environment and open space.
- Support development adjoining the creek corridor that complements the natural setting.
- Support the provision of public art on public land and in communal and semi-public spaces on private land
- Support advertising signage which achieves commercial objectives without creating visual clutter or having detrimental streetscape or amenity impacts.
- Support investment in the necessary infrastructure to ensure a high quality public realm as development intensity increases.
- Support the ongoing planting of appropriate tree species within the public realm, which contributes to local character, amenity and environmental outcomes.
- Maximise public safety in Knox Central through the incorporation of Crime Prevention through Environmental Design principles into design for the public and private realm.

- Develop a streetscape master plan for Burwood Highway to transform the public realm into a formal landscaped boulevard.

## ACTIONS

- Develop planning controls that support the achievement of high quality building design which makes a positive contribution to the public realm.
- Develop planning controls that support the achievement of a strong built form character for Burwood Highway, including street wall heights and street setbacks.
- When the Route 75 Tram is extended to Knox, work with Public Transport Victoria and VicRoads, to ensure positive public realm outcomes, including landscaping and pedestrian amenity.
- Develop entry signage for Knox Central, in accordance with the *Knox Activity Centre Entry Signage Design Framework*.
- Incorporate the public realm infrastructure project recommendations from this Structure Plan into the capital works program and determine the funding options to deliver and recover the costs associated with capital works project delivery.



Figure 11 Aerial photo showing Knox Central's built form

# *The Burwood Highway Corridor*

*Burwood Highway is the central spine of Knox Central. Much of its streetscape is currently characterised by car parking areas and low scale development, with a number of underutilised sites. The streetscape also has the benefit of mature trees in some locations and a wide road reserve affording long views to the east.*

*Recent development has started the move toward a more intense built form, however has not necessarily made a positive contribution to the public realm. Future development will support the creation of a treed boulevard framed by building podiums, consistent building setbacks and street wall heights and a high quality landscape outcome. Building heights beyond the podium level will be directed by architectural quality, impacts on adjoining sites and site capacity. The intense and consistent built form to Burwood Highway will mark the arrival to Knox Central. At ground floor, active frontages will support pedestrian activity and create a sense of place and interaction.*

*The introduction of the Route 75 tram to Knox Central will further enhance activity at street level, with pedestrian nodes forming around tram stops and intersections. Changes to traffic conditions and improvement of pedestrian amenity will make for an environment which is conducive to all forms of transport – tram, bus, car, bicycle and walking.*





Figure 12 Artist's Impression - Burwood Highway, entering Knox Central from the city

# PRECINCT PLAN

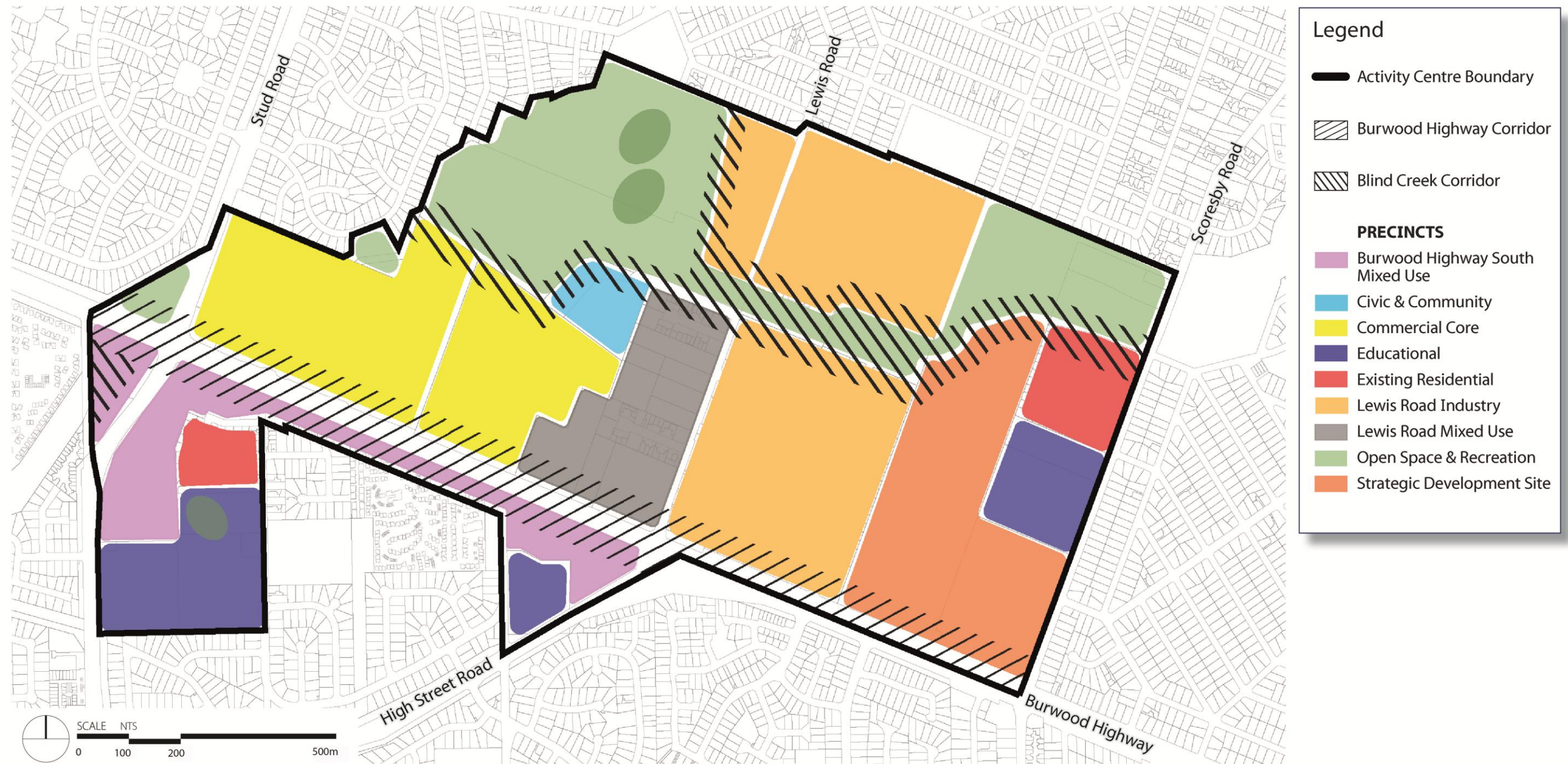


Figure 13 Activity Centre Precinct Plan

# PRECINCT OBJECTIVES AND VISION

## Burwood Highway Corridor

The Burwood Highway transects a number of precincts and will provide a distinctive, high quality and consistent built form that provides: a contemporary entryway into Knox Central and surrounds, improved frontages to the public realm, legible connections across Burwood Highway and development that strongly relates to the surrounding landscape character, in the form of a treed boulevard outcome.

## Commercial Core

The commercial core will provide a broad mix of land uses including residential, employment, business, entertainment, community and leisure activities. A reorientation of the built form within the precinct will provide integration with Lewis Park to the north and the civic and mixed use precincts to the east.

Land uses that facilitate active frontages to Burwood Highway will allow for interaction with the street and make a positive contribution to the public realm. The interface with Lewis Park will be capitalised through the development of higher density residential development, which will provide activation of the open space.

New development within the Commercial Core will improve permeability of the precinct and support pedestrian amenity and safety.

## Civic/Community

The precinct will provide opportunities for formal and informal gathering spaces through the development of integrated, multi-purpose civic facilities with related entertainment, leisure, recreation and commercial uses.

The development and use of the land will integrate with the entertainment and leisure uses in the Commercial Core the west and compliment and integrate with the recreational use of Lewis Park and the Blind Creek Corridor.

## Lewis Road Mixed Use

The Lewis Road mixed use area will see a transition from the existing industrial character to a mixed use precinct, characterised by higher density residential development with vibrant commercial premises at ground floor.

During this transition, the continuation of commercial and industrial uses with existing uses rights will be supported. New sensitive land uses will be required to address potential impacts to amenity resulting from existing commercial and industrial uses.

New land uses which are likely to result in poor amenity outcomes for residential land uses within the precinct are discouraged.

Given the fine grain subdivision pattern in some locations, consolidation of lots will be supported in order to achieve the desired land use outcomes.

Appropriate site remediation measures will be required to be undertaken prior to the commencement of new sensitive land uses.

## Burwood Highway South Mixed Use

The southern side of Burwood Highway will provide a mixed-use environment providing higher density residential development and commercial uses at ground floor. Commercial uses will be complementary to the activities within the commercial core and will activate street frontages, particular in locations shown in Figure 16.

In areas other than high pedestrian 'nodes', where active frontage may not be critical, ground floor frontages will provide transparency and surveillance opportunities.

Development will provide a consistent built form character to Burwood Highway, through the use of front setbacks, street wall heights and landscaping. Development will contribute to an active, vibrant pedestrian environment.

## Educational precincts

These areas will support the ongoing operation and expansion of existing educational land uses.

## Lewis Road Industry

This area will support the on-going viability of existing commercial/industrial uses. In addition, the area will support opportunities for emerging industry clusters and encourage a transition from traditional industrial uses to high amenity, high value employment uses over time. Non-industrial uses, such as indoor recreational facilities and places of assembly, are considered appropriate given the Activity Centre context of this industrial area. These types of uses are supported in locations that minimise amenity impacts on adjoining and nearby land uses.

Development will continue to be of a lower scale industrial nature, with the exception of sites fronting Burwood Highway. Burwood Highway provides opportunities for a more intensive built form, in keeping with the development vision for this central corridor.

## Strategic Development Site

The redevelopment of this underutilised site will provide a high amenity medium density neighbourhood in the northern portion of the site, which is well-integrated with the Blind Creek corridor.

The neighbourhood will be supported by a mixed use precinct to the Burwood Highway frontage and Scoresby Road corner which will provide a small amount of local convenience retail and support local employment opportunities.

The on-going use of part of the site by government departments is supported.

## Residential areas

The low density character of the *Wantirna Lea Estate* will be retained. The *White Road/Jackson Road* precinct will be developed to achieve a medium scale, medium density housing outcome.

# BUILT FORM GUIDELINES

## Overview

Built form guidelines have been prepared to support future development that contributes to the function of the activity centre, provides a high level of amenity for visitors, employees and residents, and set benchmarks in design quality. The guidelines will inform the development of planning controls to guide development in Knox Central.

## DESIGN ELEMENTS

### Building Design

The intensification of buildings within Knox Central presents an opportunity to achieve well-designed buildings of architectural merit in a high profile location. This design element provides guidance on façade articulation, architectural quality, the street level interface, materials and colours, and environmentally sustainable design.

This element also addresses opportunities for designing buildings for universal access and opportunities to incorporate best practice Environmentally Sustainable Development in buildings and landscaping.

### Building Height

A key driver for determining building heights is the facilitation of more intensive activity across the breadth of Knox Central and while achieving a high level of pedestrian amenity and sense of place. Street wall heights are provided for Burwood Highway, to facilitate a strong and consistent built form character for this key road. Building heights are addressed by precinct in the table below. It is important to note that the building heights referred to in Figure 14 are *discretionary requirements*. They are not mandatory requirements, but are guidelines to provide guidance for development and aid Council in its decision making.

### Siting and Setbacks

This element addresses the desired setbacks and siting requirements for development within key areas

of development in Knox Central.

The recommended setbacks for sites within the Burwood Highway Corridor focus on achieving a unified street edge, supporting street level activity and contributing to a high quality public realm.

The recommended setbacks allow for Knox Central to contribute to treed boulevard outcome for Burwood Highway, while also supporting a greater intensity of activity and development. They are not mandatory requirements, but are guidelines to provide guidance for development, support site responsive design and aid Council in its decision making.

### Landscaping

This element provides guidance for landscaping in new developments within Knox Central.

The guidelines aim to facilitate development that complements the existing landscape character of Burwood Highway and the significant vegetation concentrated around Lewis Park and the Blind Creek corridor. Landscaping within Burwood Highway and Stud Road setbacks will be required to maintain a planted setback that includes a continuous tree canopy and formal landscaping to reflect the role and context of Knox Central.

### Services, Access and Car Parking

This element addresses the treatment of services, vehicle access and car parking in developments.

Pedestrian access is also addressed in this section with a focus on providing clearly defined access for people of all levels of mobility.

The Guidelines focus on minimising the visibility of the servicing aspects of buildings i.e. air conditioning units, waste storage etc. The Guidelines also recommend reducing the visibility of car parking and vehicle access so that it does not dominate the streetscape.

### Internal Amenity

This element provides guidance on the design of internal spaces within buildings. A key focus for this

element is ensuring that access to sunlight and natural ventilation is maximised to provide high amenity spaces for occupants and reduce energy consumption.

Table 2 outlines the built form guidelines for Knox Central. Guidelines are provided for the whole activity centre. Additional requirements for each of the precincts are listed below the general guidelines.

A greater level of detail is provided for the Strategic Redevelopment Site at the corner of Burwood Highway and Scoresby Road as this is a very large site which will create a new neighbourhood with Knox Central.

## BUILT FORM GUIDELINES STRUCTURE

Objectives, design responses and outcomes to avoid for key design elements as described below:

**Design Element** - Individual elements that influence the built form character and development outcomes in Knox Central.

**Design Objectives** - A statement of the desired outcome for the relevant design element.

**Design response** - The preferred approaches for achieving the relevant design element objective(s). Other approaches for achieving the relevant objective(s) may be demonstrated to Council's satisfaction.

*The built form framework for Knox Central provides for an urban form that supports development across the Activity Centre and responds to anticipated demand over the next twenty years.*

**Table 2 – Built Form Guidelines**

<b>ALL PRECINCTS</b>	
<b>DESIGN OBJECTIVE</b>	<b>DESIGN RESPONSE</b>
<b>BUILDING DESIGN</b>	
<ul style="list-style-type: none"> <li>To provide new built form that can accommodate a significantly higher intensity of land use and activity commensurate with the role of Knox Central.</li> <li>To provide buildings that exhibit a high standard of architectural and urban design through the presentation of integrated building forms that have a sense of address, clearly articulated façades and sensitively designed building form.</li> <li>To provide buildings that have regard for adjoining sites, including the development potential of adjoining sites and the ability for future development to achieve reasonable amenity and design outcomes.</li> <li>To provide opportunities for passive surveillance of the public realm.</li> <li>To provide new building forms that are legible, attractive and representative of function.</li> <li>To contribute to sustainability outcomes, minimise resources use and contribute to the mitigation of the urban heat island effect.</li> <li>Incorporate public art in to the design of buildings, development sites and precincts.</li> </ul>	<ul style="list-style-type: none"> <li>Articulate form and façades through the use of different colours, materials, and the composition of rebates, openings and setbacks.</li> <li>Design buildings on corner sites to actively address both frontages at street level.</li> <li>The scale, massing and orientation of development should allow for daylight and sunlight penetration to adjoining sites</li> <li>Provide balconies and ground level windows overlooking the street, driveways and/or any adjoining public open space to maximise passive surveillance.</li> <li>Pedestrian entries should directly front the street; be visible and easily identifiable from streets and other public areas; provide shelter, and a sense of address.</li> <li>Incorporate Crime Prevention through Environmental Design (CPTED) principles.</li> <li>Provide active frontages and contribute to attractive, pedestrian-friendly and visually pleasing streetscapes</li> <li>External walls which may be vulnerable to graffiti should incorporate vertical landscaping or other forms of graffiti control.</li> <li>Siting of buildings to accommodate the retention and/or planting of canopy trees and established vegetation.</li> <li>Incorporate water sensitive urban design (WSUD) including stormwater re-use.</li> <li>Incorporate Ecologically Sustainable Development (ESD), including solar orientation and natural ventilation, use of sustainable materials, and energy efficiency.</li> </ul>
<b>LANDSCAPING</b>	
<ul style="list-style-type: none"> <li>To achieve landscaping and planting that complements the vegetation character of Knox and complements key features unique to Knox Central, such as Blind Creek and Lewis Park.</li> <li>To maintain a continuous setback along Burwood Highway that is planted with canopy trees and formal landscaping to reflect the role and context Knox Central and to support active and pedestrian-friendly street frontages and public spaces.</li> <li>Improve the ecological integrity of the Blind Creek corridor</li> </ul>	<ul style="list-style-type: none"> <li>Maintain and protect existing native vegetation.</li> <li>Require Water Sensitive Urban Design for development</li> <li>Development and subdivision applications include landscape concept plans</li> <li>Provide setbacks in accordance with Figure 16 to accommodate boulevard planting along Burwood Highway and Stud Road frontage</li> </ul>
<b>SERVICES, ACCESS AND CARPARKING</b>	
<ul style="list-style-type: none"> <li>To minimise the visual impact of car parking, services and access when viewed from the public realm.</li> <li>To ensure buildings services are integrated into the design of new buildings</li> <li>To prioritise pedestrian movement and the walkability of Knox Central.</li> <li>To minimise the impact of on-street car parking as a result of new development.</li> </ul>	<ul style="list-style-type: none"> <li>Pedestrian entries to buildings should be clearly visible and easily identifiable from the street.</li> <li>Require pedestrian entries to be accessible for all abilities.</li> <li>Ramps or stairs required to access a raised ground floor level must be incorporated into the building design and be provided within the property boundary.</li> <li>Distinguish residential entries from retail and commercial entries.</li> <li>Incorporate car parking and service infrastructure into building design and obscure from the public realm.</li> <li>Provide appropriate waste storage, loading and recycling facilities that are screened from public</li> </ul>

	<p>view.</p> <ul style="list-style-type: none"> <li>• Provide convenient and safe car parking, in underground or concealed deck car parking.</li> <li>• Redevelopment of existing sites should incorporate replacing ground level car parking and upper (open) levels of decked car parks, with activity- generating uses such as residential or commercial.</li> <li>• Pedestrian entry points, access, paths and walkways should be prioritised to improve walkability and the pedestrian experience.</li> <li>• Car parking and bicycle parking is to be provided at the rate specified in Clause 52.06 of the Knox Planning Scheme.</li> <li>• Incorporate opportunities for sustainable transport options such as electric car charging points and car share spaces.</li> <li>• Basement car parks should be designed with the following considerations: <ul style="list-style-type: none"> <li>○ Provide natural ventilation</li> <li>○ Integrate ventilation grilles or security gates into the façade and landscape design and minimise visibility from the public realm</li> <li>○ Provide security gates, conceal service pipes and ducts, to improve the appearance of basement entries from the street</li> </ul> </li> <li>• Loading and service areas should be located away from sensitive including residential interfaces.</li> <li>• Avoid stairs and ramps which extend into the footpath space or dominate the building frontage and setback.</li> <li>• Avoid air-conditioning units and other equipment located within view of a primary active frontage street or residential areas. Wherever possible, incorporate these elements within the building envelope.</li> <li>• Avoid parking and vehicle entries that present as a dominant element when viewed from the public realm.</li> </ul>
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**INTERNAL AMENITY**

<ul style="list-style-type: none"> <li>• To achieve a high level of internal amenity in new buildings.</li> <li>• To minimise the impact of external noise sources on new residential development.</li> </ul>	<ul style="list-style-type: none"> <li>• Design internal spaces to be flexible and adaptable, in order to accommodate a variety of uses in response to changing needs.</li> <li>• Maximise sunlight and daylight access to the living spaces in dwellings, and communal and private open space.</li> <li>• Provide suitably located end of trip facilities including secure bicycle storage.</li> <li>• Provide an appropriate level of natural ventilation to all dwellings .</li> <li>• Orientate buildings and position windows, awnings and shutters to capture solar access in winter and provide appropriate shading in summer.</li> </ul>
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<b>BURWOOD HIGHWAY SOUTH</b>	
<b>DESIGN OBJECTIVE</b>	<b>DESIGN RESPONSE</b>
<b>BUILDING DESIGN</b>	
<ul style="list-style-type: none"> <li>To provide building form that contributes to a distinctive sense of place.</li> <li>To provide a contemporary entryway into Knox Central and surrounds.</li> </ul>	<ul style="list-style-type: none"> <li>Provide active ground floor frontages in locations shown in Figure 16.</li> <li>Building frontages to High Street Road should address the public realm through the use of windows, balconies and transparent fencing.</li> </ul>
<b>BUILDING HEIGHT</b>	
<ul style="list-style-type: none"> <li>To promote a more intense built form outcome on Burwood Highway</li> <li>To provide development that is of an appropriate human scale, and provides a positive contribution to public realm and pedestrian amenity</li> <li>To achieve a consistent built form which is punctuated with feature forms at selected locations.</li> </ul>	<ul style="list-style-type: none"> <li>Building heights should be in accordance with Figure 15.</li> </ul>
<b>SITING AND SETBACKS</b>	
<ul style="list-style-type: none"> <li>To establish consistent street setbacks to the Burwood Highway frontage.</li> <li>To provide an appropriate interface and transition to surrounding sensitive residential areas.</li> <li>To provide appropriate street setbacks to side and secondary street frontages.</li> <li>To provide active ground floor frontages at key nodes of activity</li> </ul>	<ul style="list-style-type: none"> <li>Street setbacks should be in accordance with Figure 16.</li> <li>Where a development abuts an established residential area, development should respond to the objectives of Clause 55 of the Knox Planning Scheme with regard to overshadowing and overlooking.</li> <li>Where a development abuts an established residential area, development should respond to the objectives of Clause 55 of the Knox Planning Scheme with regard to side and rear setbacks.</li> <li>Avoid car parking in front setbacks.</li> </ul>
<b>LANDSCAPING</b>	
<ul style="list-style-type: none"> <li>To maintain a continuous setback along Burwood Highway that is planted with canopy trees and formal landscaping to reflect the role and context Knox Central and to support active and pedestrian-friendly street frontages and public spaces.</li> </ul>	<ul style="list-style-type: none"> <li>Landscaping provided within front setbacks should include clear trunk canopy trees and formal landscaping.</li> <li>Landscaping within Burwood Highway setbacks should be planted with canopy trees at a minimum density of one canopy tree per 5 metres of the Burwood Highway boundary (excluding the width of one driveway). Each tree should be surrounded by 20 square metres of permeable surface with a minimum radius of 3 metres. Up to 50 per cent of the permeable surface may be shared with another tree.</li> </ul>

COMMERCIAL CORE	
DESIGN OBJECTIVE	DESIGN RESPONSE
<b>BUILDING DESIGN</b>	
<ul style="list-style-type: none"> <li>To create a new, active and varied urban frontage to Burwood Highway to contribute to the amenity of the streetscape</li> <li>To contribute to the activity, safety and amenity of open space.</li> <li>To capitalise on the natural setting of Lewis Park and the views to the Dandenong Ranges.</li> <li>To improve legibility, permeability and pedestrian level interfaces through the site.</li> <li>To establish a built form and site layout which addresses and integrates with adjoining land use and development.</li> </ul>	<ul style="list-style-type: none"> <li>Provide active frontages to the Lewis Park interface, including the provision of balconies, windows and private open space.</li> <li>Provide clearly delineated internal and external pedestrian ways and streets.</li> <li>Provide an internal street network that emphasises street level activity.</li> <li>Incorporate awnings into façade design on internal pedestrian routes.</li> <li>Provide active frontages to Burwood Highway, particularly at ‘feature forms’ and pedestrian nodes.</li> <li>Clearly define building entries and provide ground and upper level active frontages</li> <li>Provide vertical articulation to visually break up the appearance of building frontages to Burwood Highway and Stud Road.</li> <li>Incorporate glazing in the Burwood Highway and Stud Road facades to allow views between the shopping centre and public realm.</li> <li>80% of the Burwood Highway frontage should comprise entries, display window, clear glazing, or other active interfaces.</li> <li>The design and function of ‘feature forms’ should be well- integrated with the broader Commercial Core precinct.</li> <li>Provide physical and visual connections to the civic/community and mixed use precincts to the north and east</li> <li>Provide physical and visual connections to Gateshead Park and the existing residential area to the north.</li> <li>Incorporate <i>Crime Prevention Through Environmental Design</i> principles into the design of new public areas and pedestrian ways.</li> </ul>
<b>BUILDING HEIGHT</b>	
<ul style="list-style-type: none"> <li>To promote a more intense built form outcome on Burwood Highway</li> <li>To provide development that is of an appropriate human scale, and provides a positive contribution to public realm and pedestrian amenity</li> <li>To achieve a consistent built form which is punctuated with feature forms at selected locations.</li> <li>To mark entries into the precinct and highlight intersecting streets.</li> <li>To provide an appropriate interface and transition to surrounding adjoining residential areas.</li> </ul>	<ul style="list-style-type: none"> <li>Building heights should be in accordance with Figure 15.</li> </ul>
<b>SITING AND SETBACKS</b>	
<ul style="list-style-type: none"> <li>To maintain a continuous setback along Burwood Highway that is planted with a canopy trees and formal landscaping to reflect the role and context Knox Central and to support active and pedestrian-friendly street frontages and public spaces.</li> <li>To provide an appropriate interface and transition to surrounding adjoining residential areas.</li> <li>Provide ground floor setbacks that allow for active frontages, particularly at ‘feature forms’ and</li> </ul>	<ul style="list-style-type: none"> <li>Street setbacks should be Figure 16.</li> <li>Provide active frontages to Burwood Highway, particularly in locations show in Figure 13.</li> <li>Extend retail and related uses to the Burwood Highway and Stud Road frontages, over the existing decked car parking areas.</li> <li>Create clear and legible punctuating points to Burwood Highway that mark entry to the precinct at</li> </ul>



pedestrian nodes.	<p>feature form locations shown in Figure 15.</p> <ul style="list-style-type: none"> <li>• Establish viable centre entries to the north side of the shopping centre to provide interaction with Lewis Park and future residential development adjoining the park.</li> </ul>
<b>LANDSCAPING</b>	
<ul style="list-style-type: none"> <li>• To achieve a high quality landscape setting, building on elements such as Lewis Park, the Blind Creek corridor, and the Dandenongs backdrop.</li> <li>• To maintain a continuous setback along Burwood Highway that is planted with a canopy trees and formal landscaping to reflect the role and context Knox Central and to support active and pedestrian-friendly street frontages and public spaces.</li> <li>• To minimise the impacts the urban heat island effect</li> </ul>	<ul style="list-style-type: none"> <li>• Provide landscaping, including canopy trees, within carparks and internal streets</li> <li>• Provide canopy tree and formal planting in Burwood Highway and Stud Road setbacks</li> </ul>
<b>SERVICES, ACCESS AND CARPARKING</b>	
<ul style="list-style-type: none"> <li>• To achieve improved pedestrian safety and amenity within the carpark and internal street network</li> <li>• To minimise the visual impact of car parking from the public realm.</li> </ul>	<ul style="list-style-type: none"> <li>•</li> <li>• Incorporate undercroft/ basement parking to periphery of centre with retail/ mixed use development over</li> <li>• Multi-level car parking must be concealed and integrated into the built form</li> <li>• Include universal design principles to maximise amenity and safety for people with limited mobility.</li> <li>• Avoid large areas of at-grade car parking.</li> </ul>

CIVIC/COMMUNITY	
DESIGN OBJECTIVE	DESIGN RESPONSE
<b>BUILDING DESIGN</b>	
<ul style="list-style-type: none"> <li>To provide new civic facilities to strengthen the physical heart of Knox Central.</li> <li>To provide adaptable and multi-purpose buildings that can respond to the needs of the community</li> <li>To provide for buildings that physically and visually connect the civic role with adjoining retail, parkland and employment networks, and contribute to the activity, safety and amenity of the natural environment and open space corridor.</li> </ul>	<ul style="list-style-type: none"> <li>Define a built form arrangement that improves physical and visual connections to Lewis Park</li> <li>Form a series of related buildings that are similar in scale, form and massing around a civic plaza</li> <li>Building design respects the advantages and view opportunities of its proximity to Lewis Park</li> <li>Building design provides for connections and synergies to adjoining land uses.</li> <li>Buildings are orientated to accommodate desire paths to and from the Commercial Core</li> <li>Provide a new road to activate the civic precinct and provide a connection from Eastgate Court to the Commercial Core</li> <li>Provide a highly accessible and visible civic precinct that is pedestrian friendly.</li> <li>Facilitate accessible and safe pedestrian links between public transport nodes and civic/community facilities.</li> <li>Incorporate accessible ground level public spaces into the design of civic and related buildings.</li> <li>Provide civic buildings that function as flexible and multi- purpose cultural/community facilities.</li> </ul>
<b>BUILDING HEIGHT</b>	
<ul style="list-style-type: none"> <li>To establish a suite of civic and mixed use forms around a central public space</li> <li>To support an increase in the scale of creekside development, towards Lewis Park where integration with the retail area occurs</li> </ul>	<ul style="list-style-type: none"> <li>Building heights should be in accordance with Figure 15.</li> </ul>
<b>SITING AND SETBACKS</b>	
<ul style="list-style-type: none"> <li>To establish a continuous setback that is complementary to the natural context of Lewis Park</li> <li>To establish a public space which provides a pedestrian connection and views to Lewis Park</li> <li>To maximise solar access to public space</li> </ul>	<ul style="list-style-type: none"> <li>Require upper level setbacks which are visually recessive when viewed from the creek</li> </ul>
<b>LANDSCAPING</b>	
<ul style="list-style-type: none"> <li>To provide landscaping that represents the important civic role of the precinct.</li> </ul>	<ul style="list-style-type: none"> <li>Provide formal landscaping that marks the approaches to the precinct and contributes to the function of public spaces.</li> </ul>

LEWIS ROAD MIXED USE	
DESIGN OBJECTIVE	DESIGN RESPONSE
<b>BUILDING DESIGN</b>	
<ul style="list-style-type: none"> <li>• To redevelop industrial building stock promoting a high level of presentation to the street frontage</li> <li>• To create a new active interface facing the Blind Creek corridor that contributes to the activity, safety and amenity of the open space corridor.</li> <li>• To provide new residential development that is designed to mitigate the impact of existing industrial uses on the amenity of residents</li> <li>• To provide development that makes a positive contribution to the public realm and pedestrian amenity</li> </ul>	<ul style="list-style-type: none"> <li>• Provide articulation and visual interest to boundary walls that are visible to the public realm</li> <li>• Incorporate noise attenuating measures into new residential development, including: <ul style="list-style-type: none"> <li>○ locating habitable rooms (particularly bedrooms) away from significant noise exposure by using spaces like walkways, laundries and storage as a buffer;</li> <li>○ noise-mitigating glazing, wall, ceiling and roof construction;</li> <li>○ using setbacks and acoustic fencing.</li> </ul> </li> <li>• Provide balconies and ground level windows overlooking the street, driveways and/or any adjoining public open space to maximise passive surveillance.</li> <li>• Avoid large building masses that dominate the streetscape</li> <li>• Avoid blank unarticulated facades along street frontages</li> <li>• Avoid sheer blank walls, including boundary walls that are visible from the public realm</li> <li>• Incorporate appropriate and fit for purpose noise attenuation measures to dwellings and residential buildings, to the satisfaction of the responsible authority, where new dwellings are constructed within the Lewis Road Mixed Use Precinct.</li> </ul>
<b>BUILDING HEIGHT</b>	
<ul style="list-style-type: none"> <li>• To support a more intense built form outcome</li> </ul>	<ul style="list-style-type: none"> <li>• Building heights should be in accordance with Figure 15.</li> </ul>
<b>SITING AND SETBACKS</b>	
<ul style="list-style-type: none"> <li>• To achieve active frontages and higher density residential development built to a sensitive human scale.</li> <li>• To create a new active interface facing the Blind Creek corridor</li> <li>• To support active ground level frontages to new streets through the development of the Master Plan for the Civic Precinct</li> </ul>	<ul style="list-style-type: none"> <li>• Setbacks to existing streets should be in accordance with Figure 16.</li> <li>• Provide a landscaped setback to Lewis Road and Bridgewood Court, including tree planting and permeable surfaces with the exception of driveways and pathways.</li> <li>• Provide active ground level frontages to Eastgate Court and Sherwood Court.</li> <li>• Support development to side and rear boundaries at ground floor/podium level, with upper level setbacks provided to support daylight access and ventilation of dwellings</li> <li>• Provide dual aspects for properties on the north side of Sherwood Court, to encourage an activated interface to the Blind Creek corridor, while maintaining an active streetscape to Sherwood Court.</li> <li>• Avoid car parking in front setbacks</li> </ul>

LEWIS ROAD INDUSTRIAL	
DESIGN OBJECTIVE	DESIGN RESPONSE
<b>BUILDING DESIGN</b>	
<ul style="list-style-type: none"> <li>To provide industrial development that is fit for purpose and representative of function</li> <li>The interface between new development and the Blind Creek corridor contributes to the activity, safety and amenity of the natural environment and open space corridor.</li> </ul>	<ul style="list-style-type: none"> <li>Development should be visually recessive when viewed from the Blind Creek corridor</li> <li>Development to the north side of Blind Creek should minimise overshadowing of the creek corridor</li> <li>Provide opportunities for passive surveillance from industrial development to open space.</li> <li>Avoid sheer walls, particularly to the street frontage.</li> </ul>
<b>BUILDING HEIGHT</b>	
<ul style="list-style-type: none"> <li>To provide for industrial development that is consistent with the prevailing built form of the precinct.</li> </ul>	<ul style="list-style-type: none"> <li>Building heights should be in accordance with Figure 15.</li> </ul>
<b>SITING AND SETBACKS</b>	
<ul style="list-style-type: none"> <li>To provide street setbacks that contribute to a consistent street frontage.</li> <li>To provide opportunities to improve the streetscape and interface with open space through the provision of suitable landscaping.</li> <li>To minimise adverse affects on the visual amenity of nearby residential, mixed use areas or open space.</li> </ul>	<ul style="list-style-type: none"> <li>Front setbacks to Burwood Highway should be in accordance with Figure 16.</li> <li>Front setbacks to other streets within the precinct should be in accordance with Clause 22.02 of the Knox Planning Scheme.</li> <li>Provide an appropriate interface and transition to surrounding sensitive areas.</li> <li>Avoid car parking in front setbacks</li> </ul>
<b>LANDSCAPING</b>	
<ul style="list-style-type: none"> <li>To maintain a continuous setback along Burwood Highway that is planted with a canopy trees and formal landscaping to reflect the role and context Knox Central and to support active and pedestrian-friendly street frontages and public spaces.</li> </ul>	<ul style="list-style-type: none"> <li>Landscaping within Burwood Highway setbacks should be planted with canopy trees at a minimum density of one canopy tree per 5 metres of the Burwood Highway boundary (excluding the width of one driveway). Each tree should be surrounded by 20 square metres of permeable surface with a minimum radius of 3 metres. Up to 50 per cent of the permeable surface may be shared with another tree.</li> <li>Provide setbacks that accommodate landscaping along boundaries adjacent to open space.</li> </ul>

**STRATEGIC REDEVELOPMENT SITE (CORNER BURWOOD HIGHWAY & SCORESBY ROAD) – see Figure 14**

DESIGN OBJECTIVE	DESIGN RESPONSE
<b>BUILDING DESIGN</b>	
<ul style="list-style-type: none"> <li>• To encourage contemporary design and architecture that incorporates ESD principles and takes full advantage of surveillance opportunities and frontage to the Blind Creek corridor</li> <li>• To ensure site responsive design that makes the most of existing site features and topography</li> <li>• To establish a strong built form presence along the Burwood Highway frontage</li> <li>• To encourage medium density housing forms that capitalise on the setting and take full advantage of outlook and frontage onto the Blind Creek corridor and long range views</li> <li>• To achieved an interface between new development and the Blind Creek corridor that contribute to the activity, safety and amenity of the natural environment and open space corridor.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide a prominent, high quality built form and landscape response to ‘mark’ the corner of Burwood Highway and Scoresby Road</li> <li>• To create a gradual transition in built form scale and character from a robust Burwood Highway frontage to the naturalistic Blind Creek interface</li> <li>• To ensure an appropriate and sensitive built form response to the interfaces with Fairhills Secondary College and Wantirna Lea residential estate to the east</li> <li>• Development should incorporate active frontages at ground level across the entire site</li> <li>• To provide frontage and ensure development fronts onto public open space to enable passive surveillance of public space</li> <li>• Development should provide appropriate interface treatments or buffers to retained Government land and industrial uses.</li> </ul>
<b>BUILDING HEIGHT , SITING AND SETBACKS</b>	
<ul style="list-style-type: none"> <li>• Require new development to provide an appropriate interface and transition to surrounding sensitive residential areas.</li> </ul>	<ul style="list-style-type: none"> <li>• Building heights should be in accordance with Figure 15.</li> <li>• Avoid development that is greater than two storeys adjacent to existing residential areas.</li> </ul>
<b>LANDSCAPING AND PUBLIC OPEN SPACE</b>	
<ul style="list-style-type: none"> <li>• The development provides open spaces that respond to the form of the site and addresses the needs of future residents.</li> <li>• Development of the site protects and enhances any remnant vegetation, particularly in the fringe areas of the existing water body.</li> <li>• To mitigate the detrimental effects of development on the abutting Blind Creek</li> </ul>	<ul style="list-style-type: none"> <li>• Development of the site should provide for a 8m wide landscape treatment along Burwood Highway</li> <li>• The development should retain and enhance the water body on site in order to facilitate integrated water management and to provide a high level of neighbourhood amenity</li> <li>• The development should incorporate street tree planting in accordance with <i>Knox Green Streets Policy</i>.</li> <li>• Provide a natural open space adjoining Blind Creek with facilities (e.g. park furniture) and retain canopy trees</li> <li>• The development should provide a local public open space (local play space with community amenity e.g. park furniture) centrally to the precinct.</li> <li>• To retain and enhance existing native vegetation along the Burwood Highway</li> <li>• Development should incorporate best practice stormwater management through the integration of water sensitive urban design (WSUD) principles</li> </ul>
<b>SERVICES, ACCESS AND CARPARKING</b>	
<ul style="list-style-type: none"> <li>• To improve access to the precinct off Burwood Highway (primarily at the existing signaled intersection with Lakewood Drive)</li> <li>• To enhance existing pedestrian crossings across Burwood Highway</li> <li>• To provide a prominent and safe public transport stop at the corner of Burwood Highway and Scoresby Road, which is integrated into the future built form and public realm.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide additional connections to the Blind Creek linear public open space and shared path</li> <li>• To provide a shared path along the length of the Burwood Highway frontage</li> <li>• Upgrade the existing bus stop along Scoresby Road (near Applegum Crescent)</li> </ul>

<ul style="list-style-type: none"> <li>• To provide pedestrian and cycle links to the Blind Creek linear open space and shared trail</li> <li>• To allow for a potential north-south pedestrian connections across Blind Creek</li> </ul>	
<b>SUBDIVISION LAYOUT</b>	
<ul style="list-style-type: none"> <li>• The site incorporates a permeable street network that provides provision for future connections to adjoining areas</li> </ul>	<ul style="list-style-type: none"> <li>• The road layout should allow for future connections through to Parkhurst Drive.</li> <li>• The road layout should maximise walkability and pedestrian connections to the Blind Creek trail</li> <li>• The road layout should provide road frontage to public open space and ensure development fronts onto public open space to enable passive surveillance of public spaces.</li> </ul>
<b>SIGNAGE</b>	
<ul style="list-style-type: none"> <li>• Minimise the visual impact of signage to existing and future residential areas</li> </ul>	<ul style="list-style-type: none"> <li>• Signage for commercial premises within the mixed use precinct should be focused on the Burwood Highway frontage</li> </ul>

STRATEGIC REDEVELOPMENT SITE (CORNER BURWOOD HIGHWAY & SCORESBY ROAD)

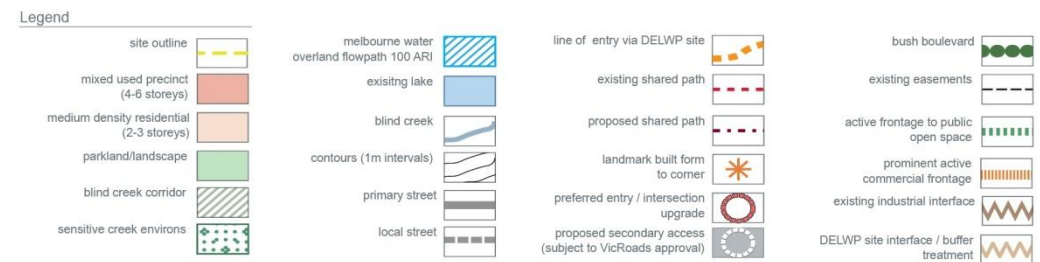
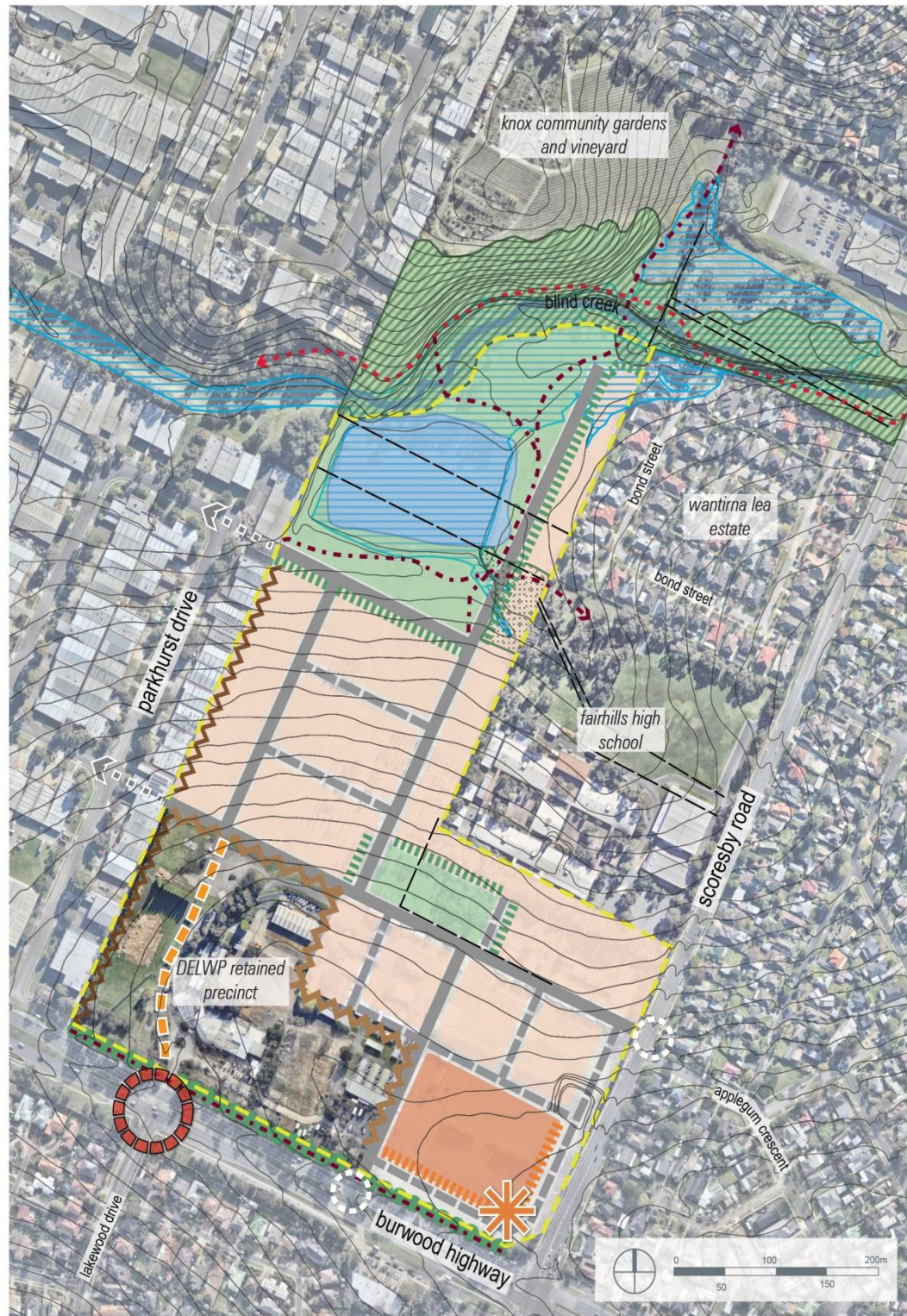


Figure 14 Master Plan for Strategic Development Site on the corner of Burwood Highway and Scoresby Road

# BUILT FORM FRAMEWORK – PREFERRED BUILDING HEIGHTS

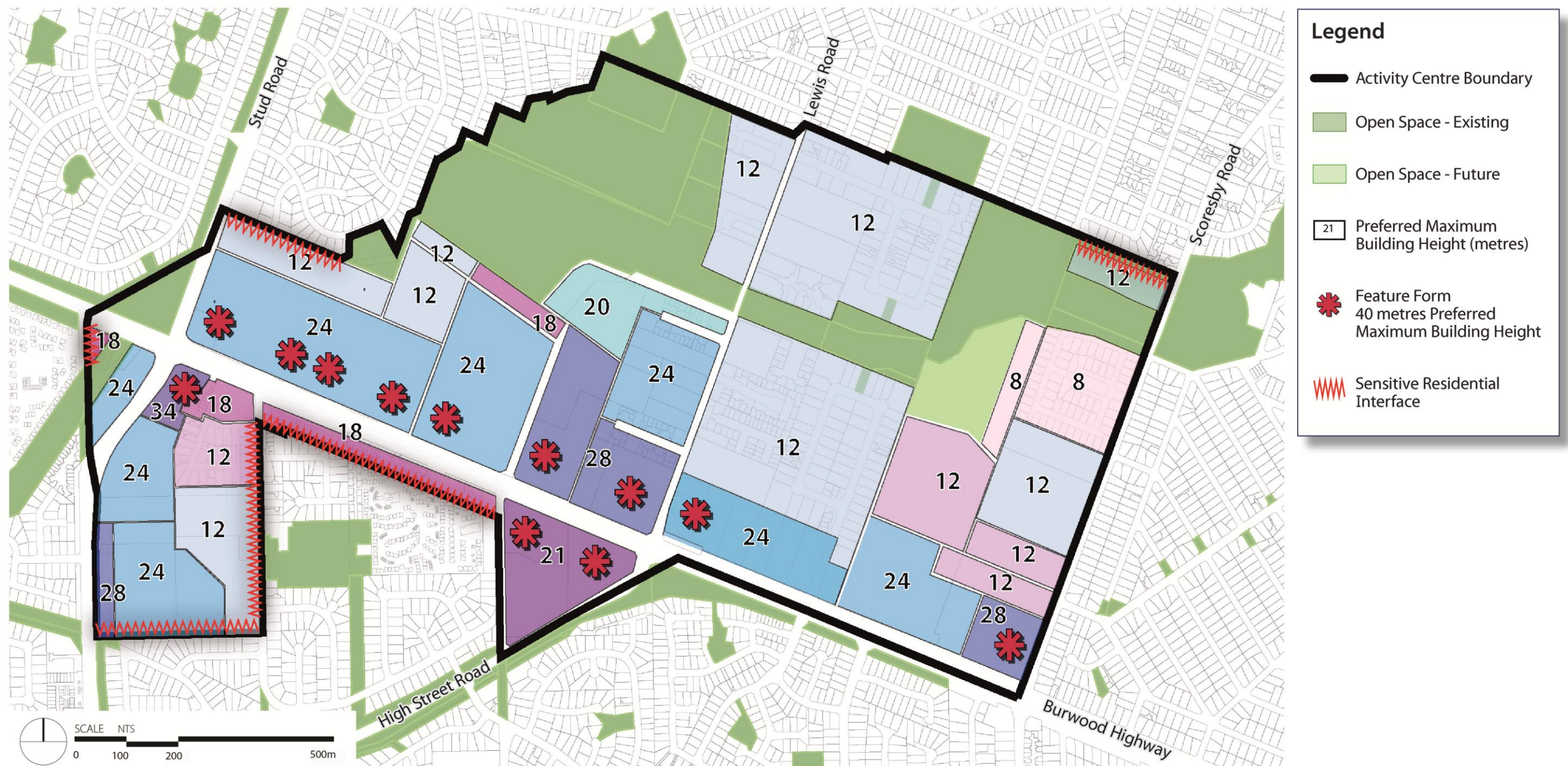


Figure 15 Built Form Framework - Preferred Building Heights

*The Knox Central Structure Plan seeks to be an enabling document that encourages an intensification of activity and development within the Activity Centre. The preferred building heights shown Figure 15 seek to provide guidance to developers and the community on the likely future urban form of Knox Central. They are not intended to be prescriptive or mandatory heights. Rather, they represent a starting point for discussion between Council and landowners regarding the capacity of development sites. In considering the appropriate scale of development on individual sites, consideration will be given to the architectural quality of proposed buildings; the appropriate level of impacts on sensitive interfaces; the contribution the building makes to the public realm; and any constraints of the site. Developments that exceed the preferred building height must demonstrate that the design is of exceptional quality and would exceed the high design quality already expected within the Activity Centre. Development adjacent to a sensitive residential interface must also demonstrate that additional amenity impacts would not result from additional height.*



# BUILT FORM FRAMEWORK – PREFERRED SETBACKS

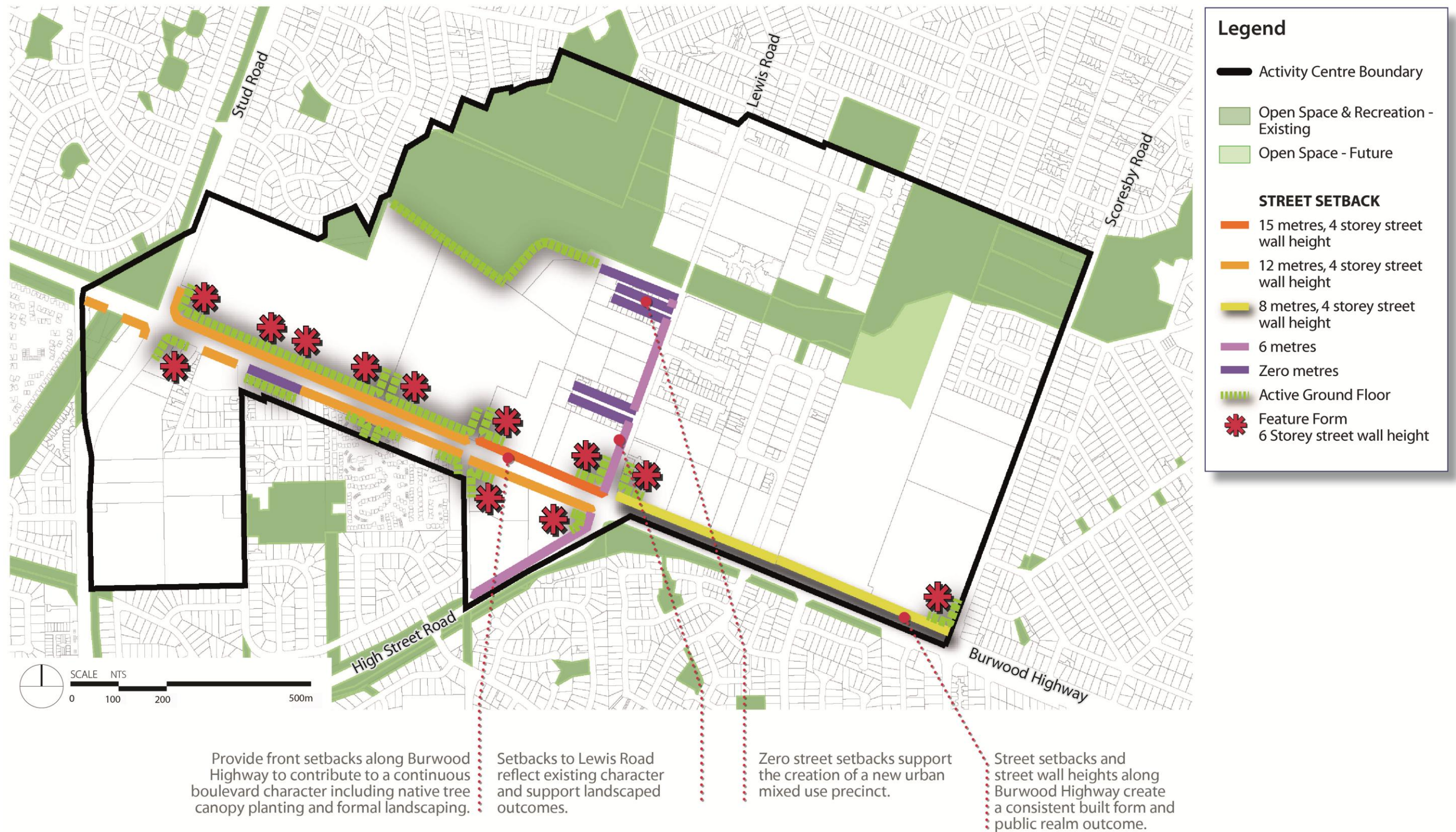


Figure 16 Built Form Framework - Preferred Setbacks

## Burwood Highway preferred setbacks section diagrams

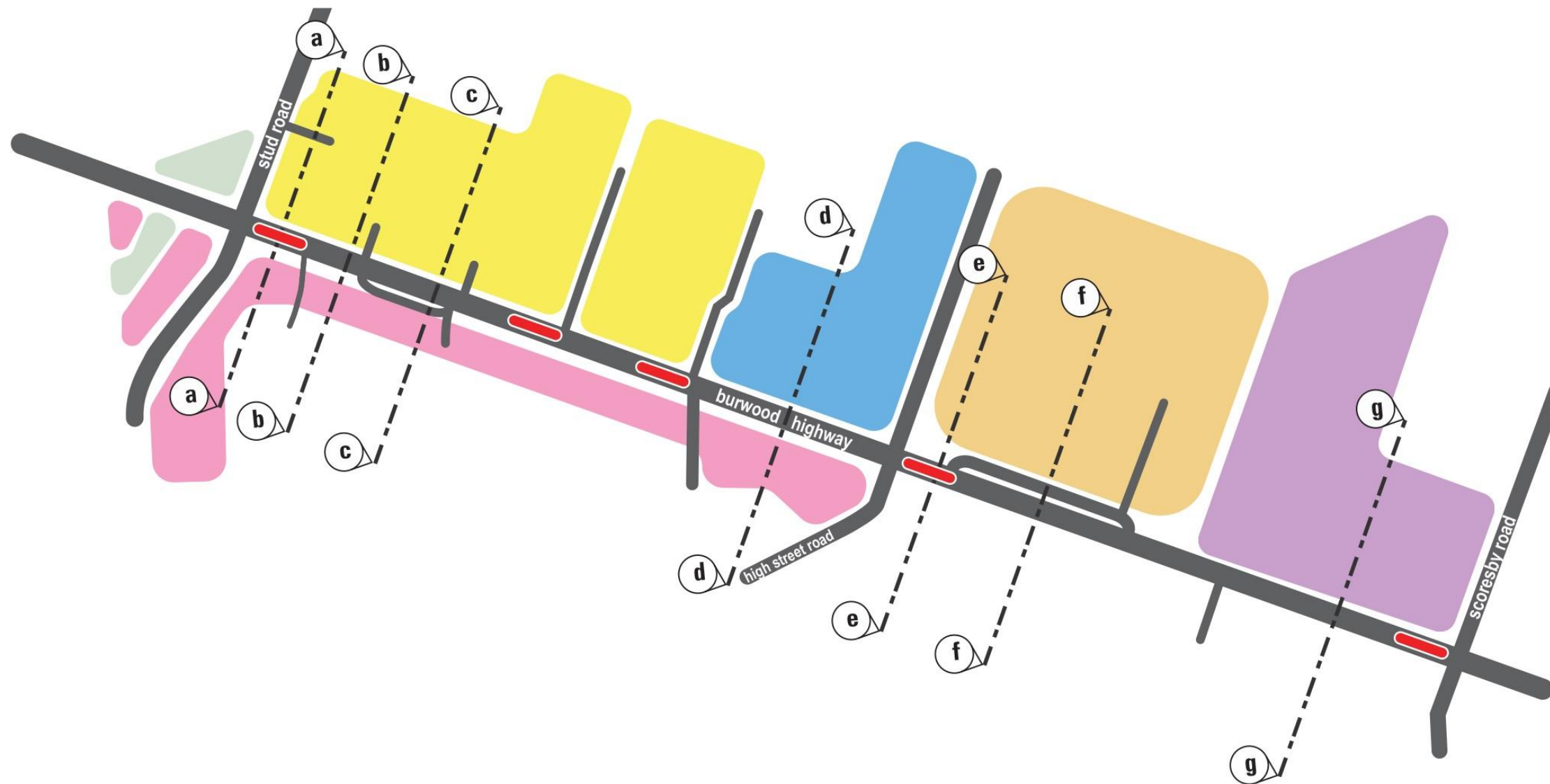


Figure 17 Section points (section diagrams on following pages)

*The setback sections on the following pages demonstrate the variety of conditions along Burwood Highway. In some locations, property boundaries are very close to the road; in others there are wide landscape reserves, service lanes and carparks separating buildings from the road. The setbacks proposed in the Structure Plan respond to these variations and seek to create a consistent built form outcome.*

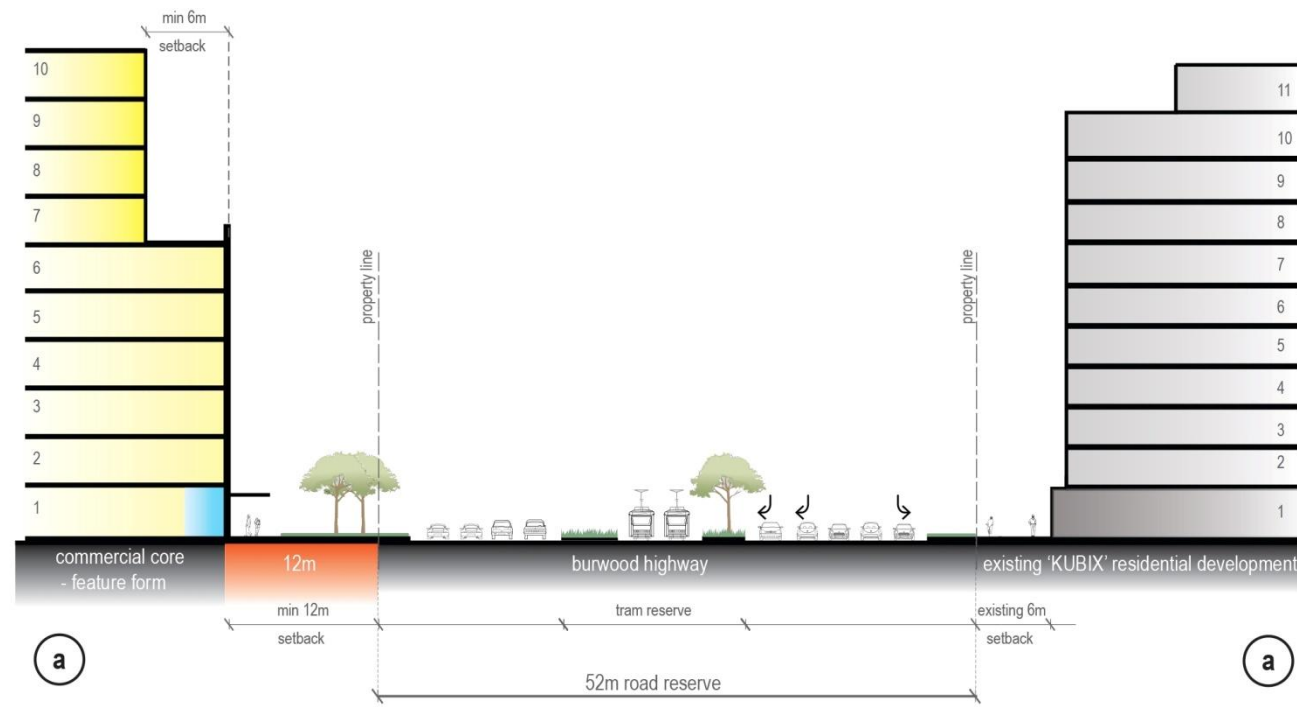


Figure 18 Section Diagram Commercial Core 'feature form' and Burwood Highway South Interface (existing Kubix building) (Section a)

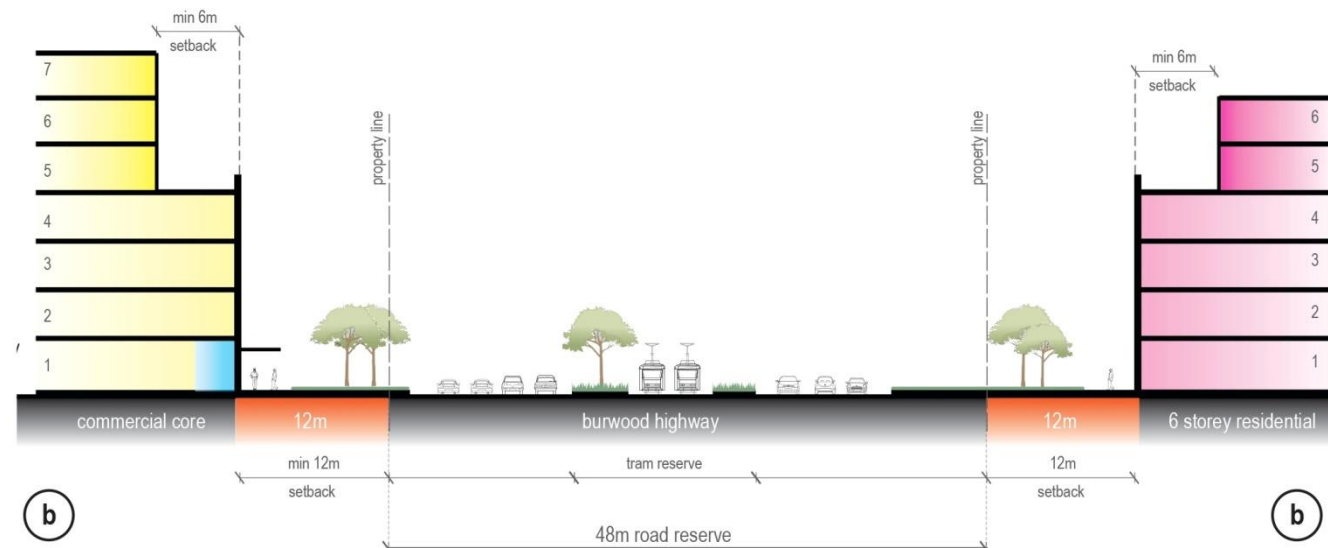
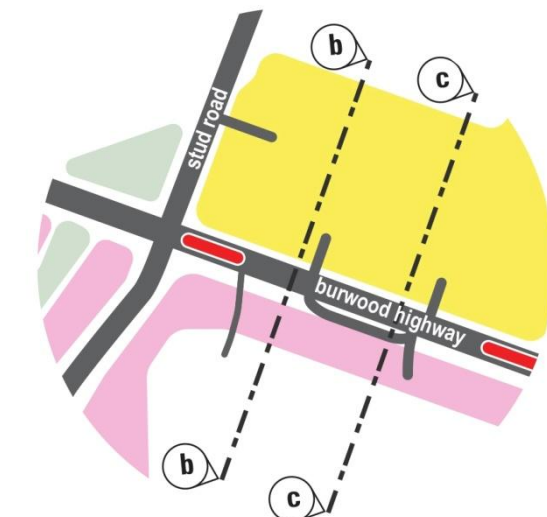
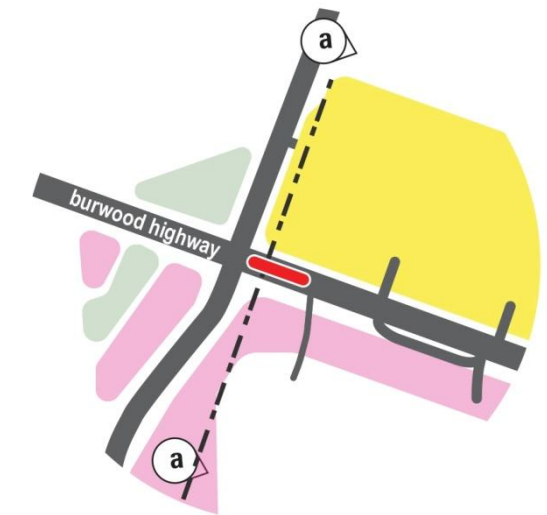


Figure 19 Section Diagram Commercial Core and Burwood Highway South Interface (Section b)



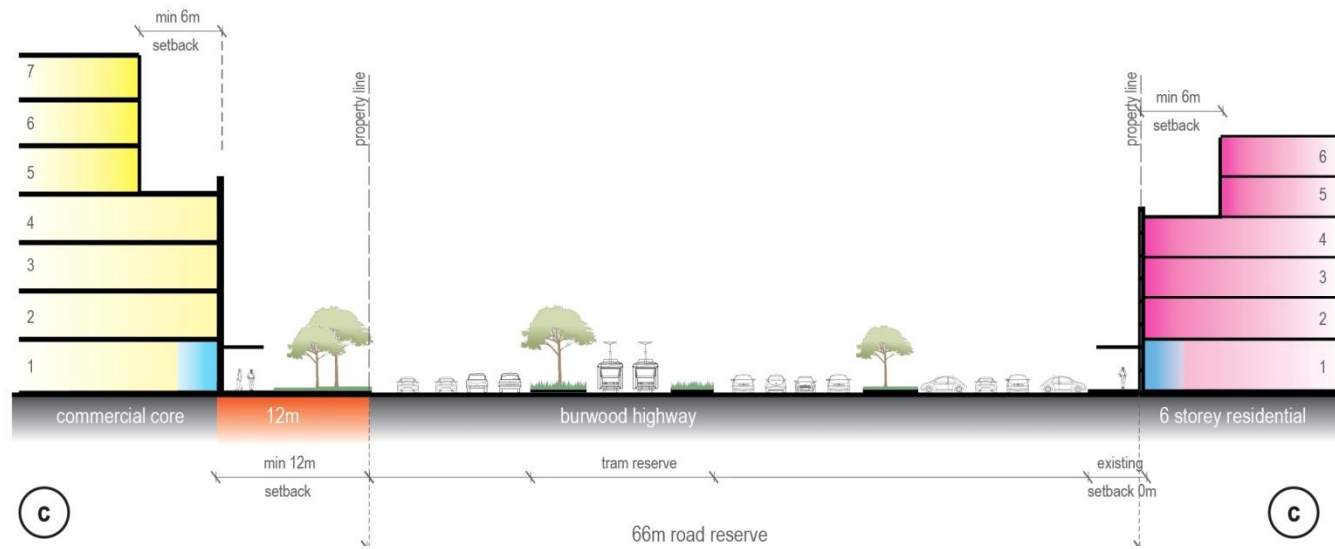


Figure 20 Section Diagram Commercial Core and Burwood Highway South Interface (Section c)

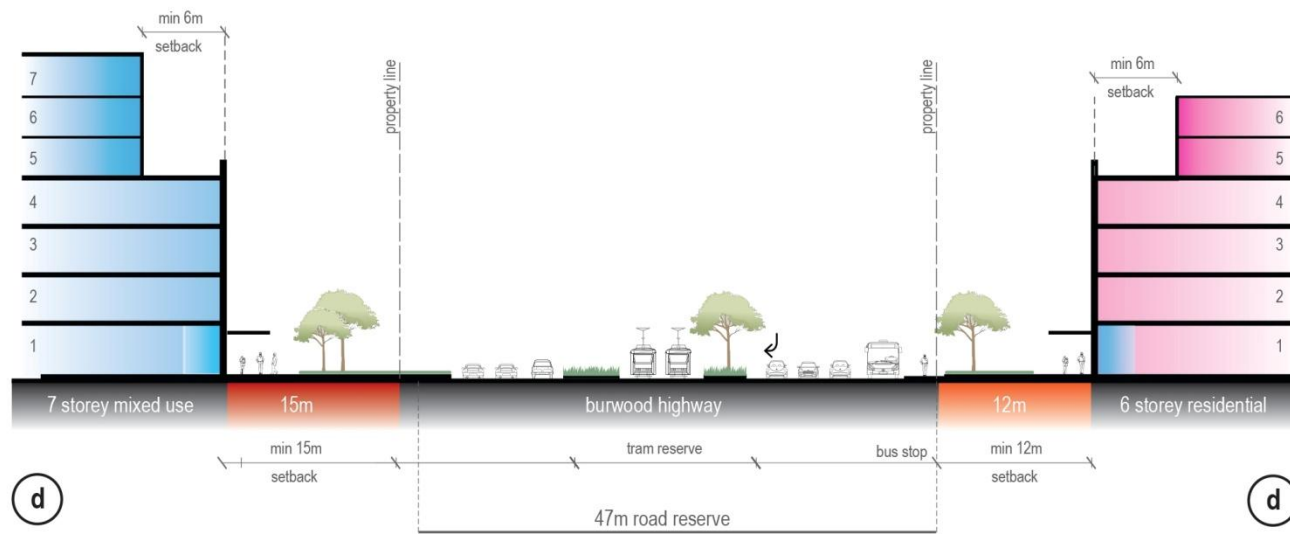
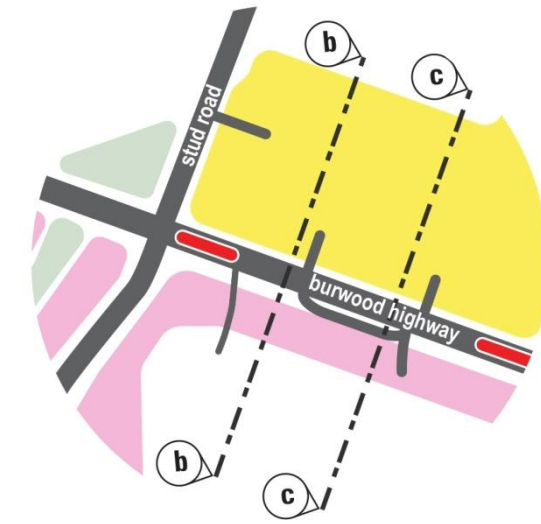
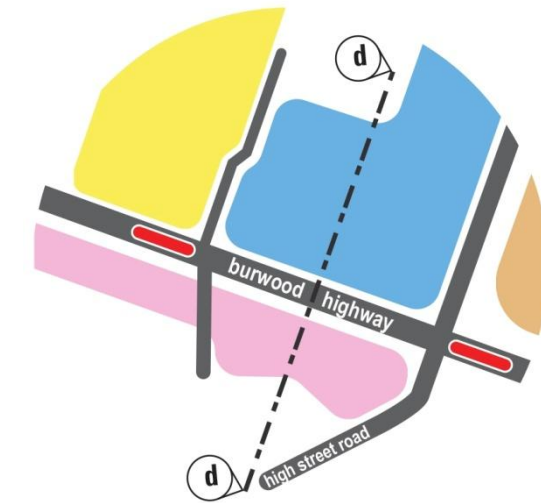


Figure 21 Section Diagram Lewis Road Mixed Use and Burwood Highway South Mixed Use (Section d)



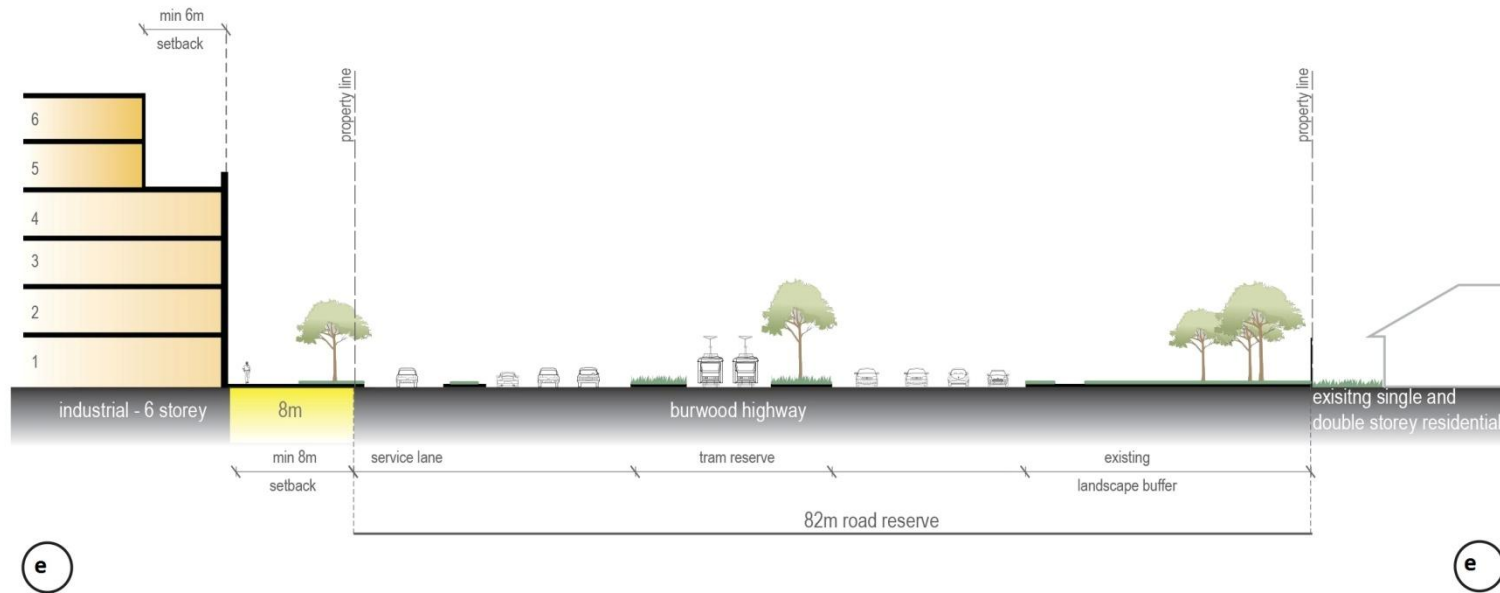


Figure 23 Section Diagram Lewis Road Industry Burwood Highway Interface (Section e)

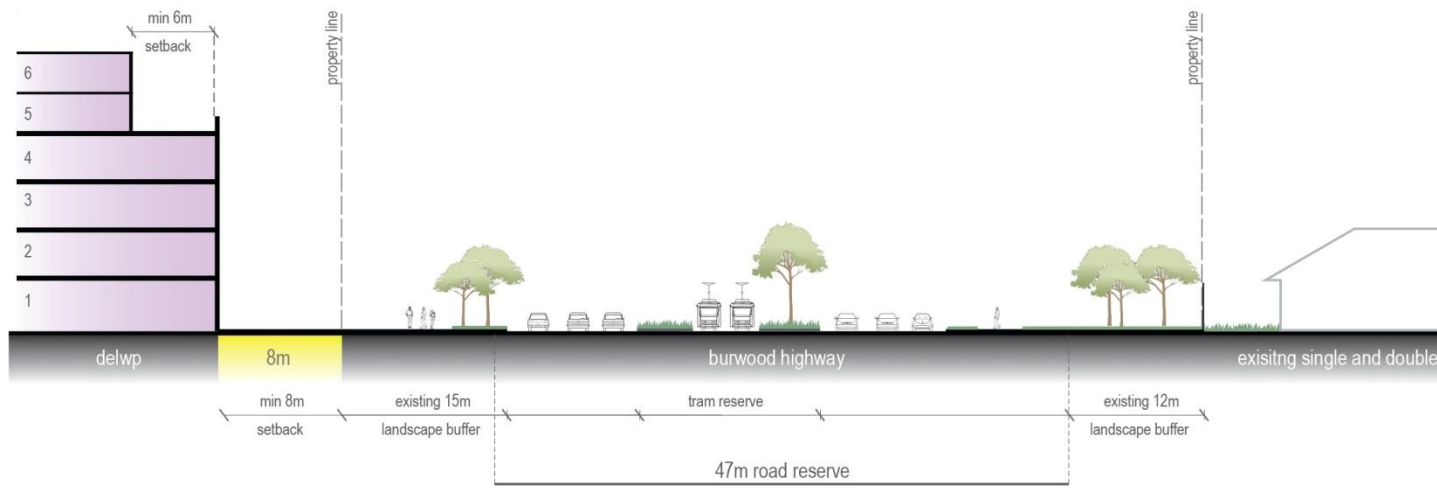
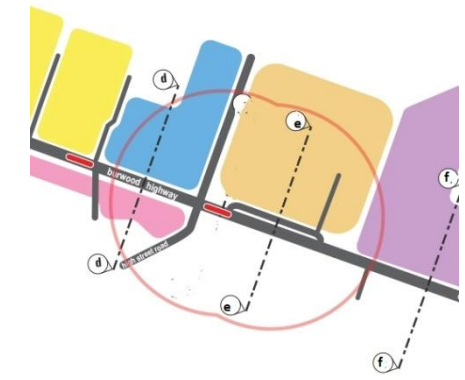
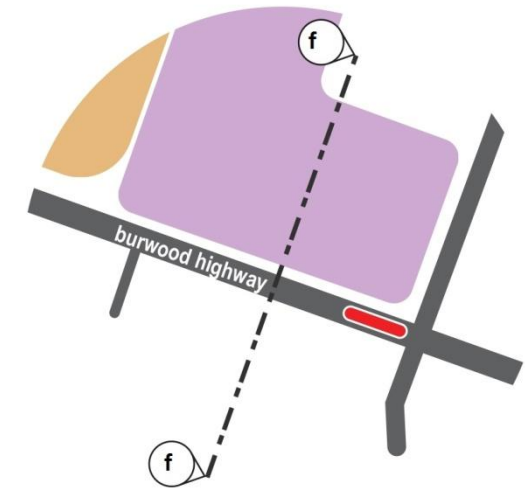


Figure 24 Section Diagram Strategic Development site (Section f)



# IMPLEMENTATION

## Overview

Upon adoption of the final Structure Plan, following public exhibition, a detailed Implementation Plan will be developed in order to prioritise the actions contained in the Structure Plan. The Implementation Plan will sit alongside the Structure Plan and will outline the steps required to implement each strategy and action in the Structure Plan including identifying responsibilities, stakeholders and priorities.

The Implementation Plan will outline statutory and non-statutory recommendations for the Structure Plan, including changes to the Knox Planning Scheme to support land use and built form objectives. The purpose of the Implementation Plan is to:

- Provide a clear path for deliverables, based on the recommendations of the Structure Plan;
- Identify statutory and non-statutory deliverables;
- Identify Council and non-council opportunities, including community and business based strategies;
- Identify opportunities for partnership and investment;
- Include staging and priorities, with opportunities for catalyst projects; and
- Provide clear performance indicators to measure the progress of the Implementation Program.

Implementation of the Structure Plan will require collaboration and support from a number of stakeholders. While Council will lead and manage the implementation process, input and management may be required from other stakeholders including State Government agencies, the private sector and the local community. These stakeholders may provide funding, own relevant sites or manage related infrastructure.

The Implementation Plan outlines the steps required to implement each strategy and action in the Structure Plan including identifying responsibilities, stakeholders and priorities. This will ensure that the

aspirations of the shared vision are realised through real projects.

All actions require Council in its various roles to facilitate and deliver. Some actions require direct input and management by others who may be landholders or infrastructure providers. A significant role for Council will be as advocate and partner with key public landholders and government authorities.

## Planning Scheme Implementation

The Draft Structure Plan and will be used to inform the preparation of a Planning Scheme Amendment to implement land use and development aspects of the Structure Plan into the Knox Planning Scheme.

The following provides a summary of the statutory recommendations provided as part of the Structure Plan.

## Statutory Recommendations

### Land Use Recommendations

The Structure Plan includes the following objectives related to land use in Knox Central:

OBJECTIVE 1 - To establish Knox Central as a focal point of activity including employment, retail, community, entertainment and leisure activity.

OBJECTIVE 2 - To enhance Knox Central's role as the civic and public heart of the municipality, where communities connect and congregate.

OBJECTIVE 3 - To enable the development of high quality medium and higher density housing, to respond to the housing needs of the Knox community, and support the activity of the centre

Land use objectives are implemented into the Planning Scheme through the Municipal Strategic Statement and the application of zones and local planning policies.

## Municipal Strategic Statement (MSS)

The Municipal Strategic Statement (MSS) provides the strategic context and justification to guide the application of zones, overlays and provisions in the Knox Planning Scheme.

The Knox MSS is currently structured around the themes of urban design, housing, environment, economic development and infrastructure. A review of the MSS is currently underway, with the draft being structured around the themes of Environmental & Landscape Values; Environmental Risks; Built Environment & Heritage; Housing; Economic Development; Community Development; Integrated Transport & Infrastructure; and Local Areas. Some changes will be required to the MSS to include references to the Knox Central Structure Plan.

## Local Planning Policy

Local planning policies guide decision making in relation to a specific discretion in a zone or overlay. They help the responsible authority and other users of the planning scheme to understand how a particular discretion is likely to be exercised.

It is recommended that a new local planning policy for the Knox Central be included within the Knox Planning Scheme to provide additional guidance for assessment of development applications within Knox Central. The policy will include objectives and strategies that will support decision making in relation to development that is assessed under the zones and overlays.

## Zoning

Some rezonings are proposed within Knox Central, where necessary to achieve the land use objectives articulated in the Structure Plan. The existing zoning will be retained for many areas within Knox Central.

## Built Form Recommendations

### Building Heights

The Structure Plan provides guidance on preferred building heights throughout Knox Central. These are set out in Figure 15 which will be embedded into the Knox Planning Scheme as part of a Design and Development Overlay.

### Design and Development Overlay

The DDO allows Council to specify design objectives and tailor detailed built form outcomes around building heights and setbacks. Council will utilise the DDO to implement built form aspects of the Structure Plan.

## Other Planning Measures

### Cultural Heritage Management

The *Aboriginal Heritage Act 2006* requires permit applicants to prepare a Cultural Heritage Management Plan if all or part of the proposed activity is a listed high impact activity and all or part of Knox Central is an area of cultural heritage sensitivity which has not been subject to significant ground disturbance.

A significant proportion of Knox Central is located within an area of cultural heritage sensitivity (i.e. within 200m of Ferntree Creek). Planning applications within these areas involving high impact activities, as defined in the Aboriginal Heritage Regulations 2007, will be required to prepare a Cultural Heritage Management Plan in accordance with Practice Note 45 (Aboriginal Heritage Act 2006 and the Planning Permit Process).

## Next Steps

### Finalising the Structure Plan

It is anticipated that the Draft Structure Plan and Planning Scheme Amendment will be on public exhibition for a period of at least one month in late 2016. The exhibition period provides the general public with an opportunity to submit feedback on the Structure Plan.

### Planning Scheme Amendment

The Planning Scheme Amendment has been prepared to implement relevant parts, including the built form controls, of the Structure Plan into the Knox Planning Scheme. Public engagement will occur as part of the exhibition period of the Planning Scheme Amendment as required by the *Planning and Environment Act 1987*. This exhibition period will occur concurrently with exhibition of the adopted Draft Structure Plan.

### Council Adoption

The final Draft Structure Plan, including the Implementation Plan and Planning Scheme Amendment will be issued to Council for formal adoption.

### Approval of Planning Scheme Amendment

Following Council's adoption of the Structure Plan and associated Planning Scheme Amendment, the Planning Scheme Amendment must be submitted to the Minister for Planning for approval.

### Non-statutory implementation measures

Non-statutory implementation measures are outlined in the Knox Central Structure Plan – Implementation Plan.

## Management, Monitoring and Review

As part of the implementation process, Knox City Council will review, manage and measure the implementation of the Structure Plan. It is proposed that the review of the Structure Plan will occur every ten years, with a mid-point review taking place every five years.

This will review and analyse:

- The actions and projects that have been delivered or underway;
- The success of key actions and projects;
- The consistency of projects against the vision for Knox Central and the objectives of the City Plan; and
- Any obstructions preventing the successful implementation of the program.

This process will allow Council to measure the success of the implementation program; adjust the program as needed; and allocate future resources as necessary to ensure the vision for Knox Central can be achieved.

Advancement of actions in the Implementation Plan will require Council's continued and dedicated involvement and commitment through business and resource planning processes.

# APPENDIX A

## Alignment of Structure Plan and City Plan Objectives

KNOX CENTRAL STRUCTURE PLAN OBJECTIVES		OBJECTIVE 1 To establish Knox Central as a focal point for activity including employment, education, retail, community, entertainment and leisure activity.	OBJECTIVE 2 To enhance Knox Central's role as the civic and public heart of the municipality, where communities connect and congregate.	OBJECTIVE 3 To enable the development of high quality medium and high density housing, to respond to the housing needs of the Knox community, and support the activity of the centre.	OBJECTIVE 4 To capitalise on Knox Central's natural and environmental features to distinguish it from other activity centres.	OBJECTIVE 5 To facilitate an accessible and safe active and public transport network to and within Knox Central.	OBJECTIVE 6 To provide an efficient street network to connect key destinations including nodes of activity within Knox Central	OBJECTIVE 7 To achieve high quality built form and public realm which defines Knox Central as a premier mixed use activity centre.
CITY PLAN OBJECTIVES	<b>HEALTHY, CONNECTED COMMUNITIES</b>							
	1.1 The Knox community benefits from good health and wellbeing at all life stages				✓	✓		
	1.2 A safe community with strong community connections and where learning and volunteering are valued and supported	✓	✓					
	<b>PROSPEROUS MODERN ECONOMY</b>							
	1.1 Knox has a strong local economy that supports business growth, jobs and community wealth	✓	✓					
	1.2 Improve local opportunities for people to live, work, learn and play in Knox	✓		✓	✓	✓		✓
	<b>VIBRANT AND SUSTAINABLE BUILT AND NATURAL ENVIRONMENTS</b>							
	1 The changing needs of a diverse community are supported through planned growth and change in housing and infrastructure that respects both built form and natural systems, and resource availability			✓	✓	✓	✓	✓
	1.2 Biodiversity and places of natural significance, including waterways and open space are highly valued, protected and enhanced				✓			✓
	1.3 Infrastructure networks provide transport choice, affordability and connectivity					✓	✓	
	<b>CULTURALLY RICH AND ACTIVE COMMUNITIES</b>							
	1.1 Improve the acceptance and valuing of diversity and difference in the Knox community		✓					
	1.2 Increase use of public spaces and infrastructure for the purposes of cultural expression and physical activity		✓		✓			✓
	<b>DEMOCRATIC AND ENGAGED COMMUNITIES</b>							
	1.1 Improve community leadership and participation in Knox		✓					
	1.2 Increase opportunities for the Knox community to participate in public decision-making processes		✓					
	1.3 Ensure Council is well governed and demonstrates effective leadership		✓					



