



LAND USE AND BUILT FORM STRATEGY

the COBURG initiative

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1. Introduction

1.1 Scope and Purpose

This Land Use and Built Form Strategy has been prepared to implement the vision and overall objectives for The Coburg Initiative (TCI), as they relate to land use and built form.

This Strategy is the primary document to guide decisions on land use and development within the TCI area. It underpins all associated amendments to the Moreland Planning Scheme, and as such, underpins the assessment of all applications for planning permits within the TCI area.

This Strategy is targeted to guide land use and development of both public (Council and State government) and privately owned land within the TCI area.

The Strategy will be implemented via amendments to the Moreland Planning Scheme, including:

- > Introduction of the Activity Centre Zone (ACZ)
- > Changes to the Local Planning Policy Framework (LPPF), including the Municipal Strategic Statement (MSS)
- > Changes to the car parking rates (via introduction of a Parking Strategy and Parking Precinct Plan for the centre)
- > Application of the Public Acquisition Overlay (PAO)
- > Application of the Development Contribution Plan Overlay (DCPO)

1.2 What is the Strategy Based On?

The Strategy is based on the objectives of the Central Coburg 2020 Structure Plan 2006, but presents updated requirements for land use and built form prepared by the TCI.

The Strategy incorporates the relevant land use and built form components of the following TCI documents:

- > Economic Development Strategy (includes the Concept Development Plan, Open Space Network, Transport and Movement Network, information on development yields, land use and community facilities).
- > Public Realm and Infrastructure Strategy (includes the Open Space Network, Transport and Movement Network and details about infrastructure projects).
- > Building Heights and Setbacks Justification (refer Attachment 1).

1.3 Structure

Each section of the Land Use and Built Form Strategy is divided into **objectives**, **requirements** and **implementation**, as follows:

- > **Objectives** provide the overall guidance about what is intended for the TCI area, and guide the exercise of discretion in assessing whether planning permit applications have met the requirements.
- > **Requirements** are expected to be met to achieve the objectives. If requirements are not met, adequate justification must be given about how the objectives can be satisfied in alternative ways.
- > The **Implementation** section identifies the specific changes to the Moreland Planning Scheme that are intended, as well as any other associated programs or pieces of work that must be implemented concurrently with a planning scheme amendment, to ensure the objectives and requirements can be achieved.



Figure 1: TCI and Activity Centre Boundaries

1.4 Coburg Initiative Boundary

As noted above, the Land Use and Built Form Strategy has been prepared for the TCI project. Therefore, it covers only the land contained within the TCI boundary.

The TCI boundary is located within the broader area of the Coburg Principal Activity Centre. The TCI boundary excludes the Pentridge site and land fronting Sydney Road south of Harding and Munro Streets and north of O'Hea and Church Streets.

The TCI boundary and Coburg Activity Centre boundary are illustrated in *Figure 1*.

2. Vision

The vision for TCI reflects the same vision established for the Coburg Principal Activity Centre (contained in the Central Coburg 2020 Structure Plan, 2006), as follows:

'Central Coburg develops as the prime shopping, living, employment and activity precinct in Moreland. The centre is transformed into an attractive system of streets and spaces. Central Coburg becomes a sought-after living environment, offering a range of housing choices, including high density housing. Most people arrive at the centre on foot, by bike or public transport. The provision of a range of services enables people to conduct a number of different activities based on the one trip. Central Coburg is linked with networks of green space.'

2.1 The Coburg Initiative Delivery Brief Principles

Building on the vision, the TCI Delivery Brief Principles are detailed below:

Central Coburg will revive and capitalise on its sense of place by:

- > Recognising its history while building a strong economic future.
- > Connecting all its people and generating visible local pride and ownership of place.
- > Developing its cultural vitality and embracing entrepreneurship, creativity and innovation.

Central Coburg will support a vibrant, safe, diverse, connected and harmonious community by providing:

- > A place that is economically and environmentally efficient, economically and socially equitable, and socially and environmentally healthy.
- > A pedestrian oriented environment, with streets, laneways and other public spaces that are attractive, safe, inviting and lively and by maintaining a human scale, flavour and feel to Sydney Road.
- > Streets that serve walking, cycling, public transport, delivery vehicles and private vehicles, in that order of priority, and easy access to regular and reliable public transport services of all types.

- > In one accessible location, mixed use development throughout that includes a range of services, and community and cultural facilities that reflect a growing and diverse community.
- > Residential development that is high density, diverse, accessible and adaptable, includes affordable and social housing, and gives housing opportunities to all people.
- > Both public and private developments and public spaces that are accessible and allow participation by people of all abilities and ages.
- > A feature of high quality open spaces with more street trees and off-street plantings, landscape features and improved links between places to allow social interaction for all ages and circumstances.

Central Coburg will be an exemplar eco-city of the 21st century by:

- > Harnessing the benefits of its close proximity to the Melbourne CBD and using its significant public transport links to strengthen Coburg's role within the northern region as a principal activity centre and increasing opportunities for people to work, study and play close to home.
- > Contributing to an excellent built environment through quality, sustainable design, development and stewardship and developing a reputation as a smart city.

3. Land Use

3.1 Objectives

- > To create a high density, mixed use centre with a diversity of land uses, equivalent to its role as a Principal Activity Centre.
- > To facilitate development that contributes to the achievement of the dwelling and land use floor space targets established for the TCI, as detailed in the Economic Development Strategy.

Residential Uses

- > To substantially increase the number of dwellings within the TCI area.
- > To provide a diversity of dwelling sizes (studio, 1, 2 and 3+ bedrooms).
- > To encourage residential uses within mixed use buildings.
- > To provide affordable housing targeted to people in the lowest 40% of income groups (refer to Economic Development Strategy for definition of affordable housing, targets and approaches).
- > To encourage developer initiated partnerships with Housing Associations to provide affordable housing.

Retail Uses

- > To substantially increase the amount of retail floor space and expand the retail mix within the TCI area.
- > To create a strong, identifiable retail precinct focusing on Sydney Road and Victoria Street.

- > To ensure retail uses are consolidated within the core of the TCI area (the core is defined as Precinct 1, refer Figure 2).
- > To maintain existing retail anchors within the core (e.g. supermarkets, Coburg Market) and encourage new anchors (e.g. discount department store, cinema).
- > To encourage retail uses to be located within mixed use buildings.

Office Uses

- > To substantially increase the amount of office floor space within the TCI area.
- > To encourage office floor space to be located within mixed use buildings.
- > To provide work from home (home-office) opportunities.
- > To consider stand alone office developments on merit, having regard to the contribution to the economic sustainability of the TCI area and the objectives of the Economic Development Strategy.

Entertainment Uses

- > To facilitate a range of entertainment options within the TCI area.
- > To encourage the consolidation of entertainment activities within the core precinct (defined as Precinct 1, refer Figure 2).
- > To encourage the development of evening activities, including restaurants and other forms of entertainment.
- > To ensure entertainment facilities are designed to minimise impacts on nearby residents and uses.

Community Uses

- > To locate key community services and facilities within the TCI area, in accordance with the Economic Development Strategy.
- > To encourage the location of community facilities within mixed use buildings.
- > To facilitate the redevelopment of the Coburg Library within the core precinct.
- > To facilitate the relocation of the John Fawkner Hospital into the TCI area.
- > To encourage uses associated with the hospital to locate within the TCI area.
- > To discourage uses associated with the hospital (e.g. medical suites, etc) from locating within Residential 1 Zoned areas outside the activity centre (e.g. along Bell St east of activity centre).

Open Space Uses

- > To ensure public open space is designed and developed in accordance with the Public Realm Strategy (refer Public Realm and Infrastructure Strategy).

Transport Uses

- > To ensure transport infrastructure is designed and developed in accordance with the Street Network (refer Public Realm and Infrastructure Strategy).

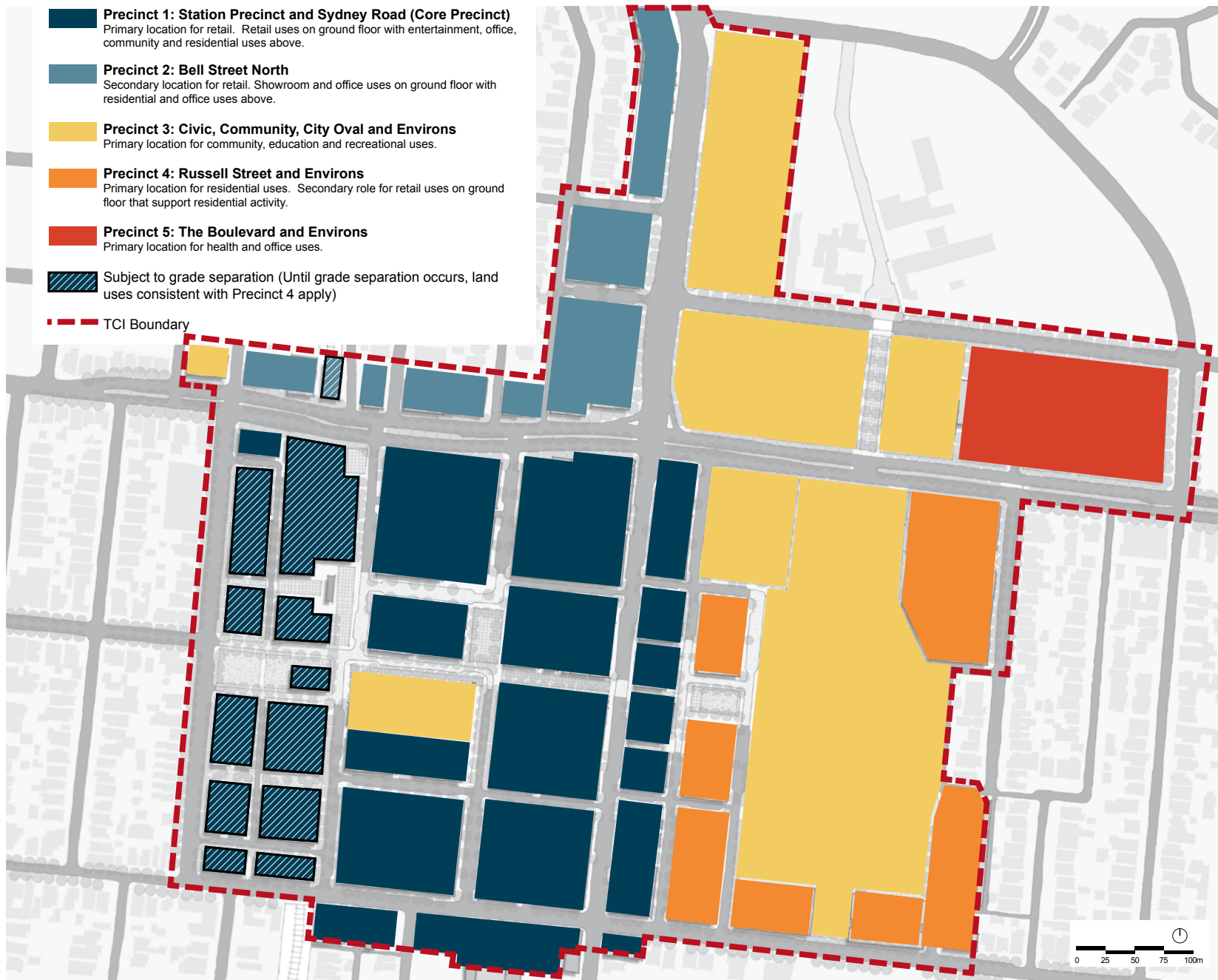


Figure 2: Land Use and Precinct Map (refer section 5 for Precinct Guidelines)

3.2 Requirements

- > Land use should be located in accordance with *Figure 2 Land Use and Precinct Map* (refer section 5 for *Precinct Guidelines*).
- > Land use should have regard to the overall land use floor space and dwelling targets for the TCI area, contained in the Economic Development Strategy.
- > In developments that include 10 or more dwellings, a diversity of dwelling sizes should be provided.
- > In developments that include 10 or more dwellings, a minimum 20% of dwellings should be affordable and targeted to people in the lowest 40% of income groups. This may be demonstrated in a number of ways, although partnerships with Housing Associations are strongly encouraged. An Affordable Housing Report is required to be submitted to detail the affordable housing commitments of the proposal (refer section 12 Application Requirements).

3.3 Implementation

- > Include land use objectives and requirements in the ACZ of the Moreland Planning Scheme.
- > Include a Table of Uses in the ACZ of the Moreland Planning Scheme to specify those uses that are as of right, those uses that require a permit and those uses that are prohibited, in accordance with the *Land Use and Precinct Map (Figure 2)* and *Precinct Guidelines (section 5)*.
- > Affordable housing cannot be guaranteed through the planning scheme. Therefore, the objectives for affordable housing in the centre require a defined commitment beyond the planning scheme. The approach to affordable housing will be led by the commitments contained in the Economic Development Strategy.
- > Develop local government implementation tools to ensure affordable housing, such as site specific planning tools already used in inner Sydney, Perth and Adelaide, should be adopted.
- > Ensure a strategic ongoing role for (a) monitoring funding opportunities and (b) project identification with housing associations and socially committed capital providers.
- > Develop a shop top development strategy which will attract current property owners to participate, and create a 'pool' of properties to convert to new residential stock (economies of scale for an investor/developer).

4. Built Form

4.1 Objectives

- > To establish an overall built form pattern of tallest buildings in the core and fronting Bell Street, transitioning down to more modest scale buildings at the fringes, ensuring a transition in scale to the low density suburban hinterland.
- > To encourage high quality, contemporary architecture.
- > To ensure buildings enhance public spaces, connect well to streets, are energy and resource efficient, and are able to accommodate changing uses over their lifetime.
- > To ensure built form makes provision for identified new streets and pedestrian links.
- > To ensure all buildings are designed to meet best practice standards for Environmentally Sustainable Design (refer section 6).

Interface with Public Realm

- > To ensure new development contributes to the safety, visual interest and vitality of streets, pedestrian links and public spaces.
- > To ensure development maximises solar access in public spaces relative to their role and function, and helps create micro climate conditions that provide a high level of pedestrian amenity.
- > To ensure development contributes to improved streetscapes, in accordance with the TCI Streetscape Masterplan (refer to Public Realm and Infrastructure Strategy).

Internal Design

- > To maximise a building's ability to accommodate a range of uses over its lifetime.
- > To achieve a healthy indoor environment quality for the wellbeing of building occupants.
- > To ensure buildings are designed to provide dignified and independent access for all and meet best practice standards for adaptability and accessibility for people with limited mobility.
- > To ensure the provision of bicycle and car parking meets the sustainable transport objectives of TCI and is designed and located for convenient, safe and efficient use.

Open Space (Private and Communal) and Landscaping

- > To ensure the adequate provision of private and communal open space.
- > To provide sustainable landscapes which enhance the appearance of development and improve micro-climate conditions.

Off Site Impacts

- > To minimise the impact of noise pollution.
- > To allow adequate daylight and sunlight to neighbouring properties and public open space.
- > To ensure development limits overlooking into private open space and habitable rooms, relative to the reasonable expectations of living in a Principal Activity Centre.

4.2 Requirements

- > Building heights should be consistent with *Figure 3 Building Heights*, provided that the overshadowing standards defined below are achieved.
- > Building setbacks should be consistent with *Figures 4 and 5 Cross Section Diagrams*.
- > Building heights and setbacks should meet the following overshadowing standards for public spaces (the building heights and setbacks identified in figures 3, 4 and 5 meet these overshadowing standards):

Category 1 (Civic Square Market Site) - No more than 1/2 the space to be in shadow at any time between 10.30am and 2.30pm (4hrs) on 21 June (Winter Solstice).

Category 1A (Bridges Reserve) – No more than 1/3 of the space to be in shadow at any time between 10.30am and 2.30pm (4hrs) on 21 June (Winter Solstice).

Category 2 (Vic Mall) - No overshadowing of the southern footpath (within 3m from the property boundary) between 11.00am and 2pm (3hrs) on 21 June (Winter Solstice).

Category 3 (Civic Square Russell Street Site, Civic Square Bob Hawke Centre Site, Station Square) - No more than 1/3 of the space to be in shadow between 10.30am and 2.30pm (4hrs) on 21 March / September (Equinox).

- > New streets and pedestrian links should be provided in accordance with *Figure 6 New Streets and Pedestrian Links*.

- > Active frontages should be provided in accordance with *Figure 7 Active Frontages* and *Table 1 Active Frontages*.
- > Vehicle access to development sites should be located in accordance with *Figure 7 Active Frontages*.
- > General streetscape upgrades should be undertaken in conjunction with construction works as appropriate, in accordance with the TCI Streetscape Masterplan (refer Public Realm and Infrastructure Strategy).
- > In developments that include 10 or more dwellings, at least 20% of dwellings should be fully adaptable and designed in accordance with the requirements of AS4299 (Class C). This includes the following features: a clear path from the street to a level entry; wider doorways and halls; a toilet suitable for people with limited mobility on entry level; reinforced bathroom/toilet walls so grab rails can be fitted; and stepless shower features or floor slab that allows easy and inexpensive installation at a later stage. The remainder should be visitable and comply with the visitable definition included in AS4299. This means there should be at least one wheelchair accessible entry and path of travel to the living area and to a toilet suitable for people with limited mobility.
- > Developments of four or more storeys will be assessed against the *TCI Built Form Guidelines*, included in *Table 2*.
- > Residential and home-office developments up to three storeys should satisfy the relevant ResCode standards at clause 54 and 55 of the Moreland Planning Scheme, and where relevant, have regard to the *TCI Built Form Guidelines*, included in *Table 2*.

4.3 Implementation

- > Include the built form objectives, requirements and guidelines in the ACZ of the Moreland Planning Scheme.
- > Include the TCI Built Form Guidelines in the ACZ and/or reference or incorporate the guidelines in the planning scheme.
- > Consider developing the TCI Built Form Guidelines (Table 2) and the ESD Guidelines (Table 5) into a stand-alone document titled '*TCI Building Design Requirements*' for easy reference and distribution to developers/applicants.
- > Consider use of relevant overlays (e.g. PAO) and/or alternative mechanisms to achieve new streets and pedestrian links.

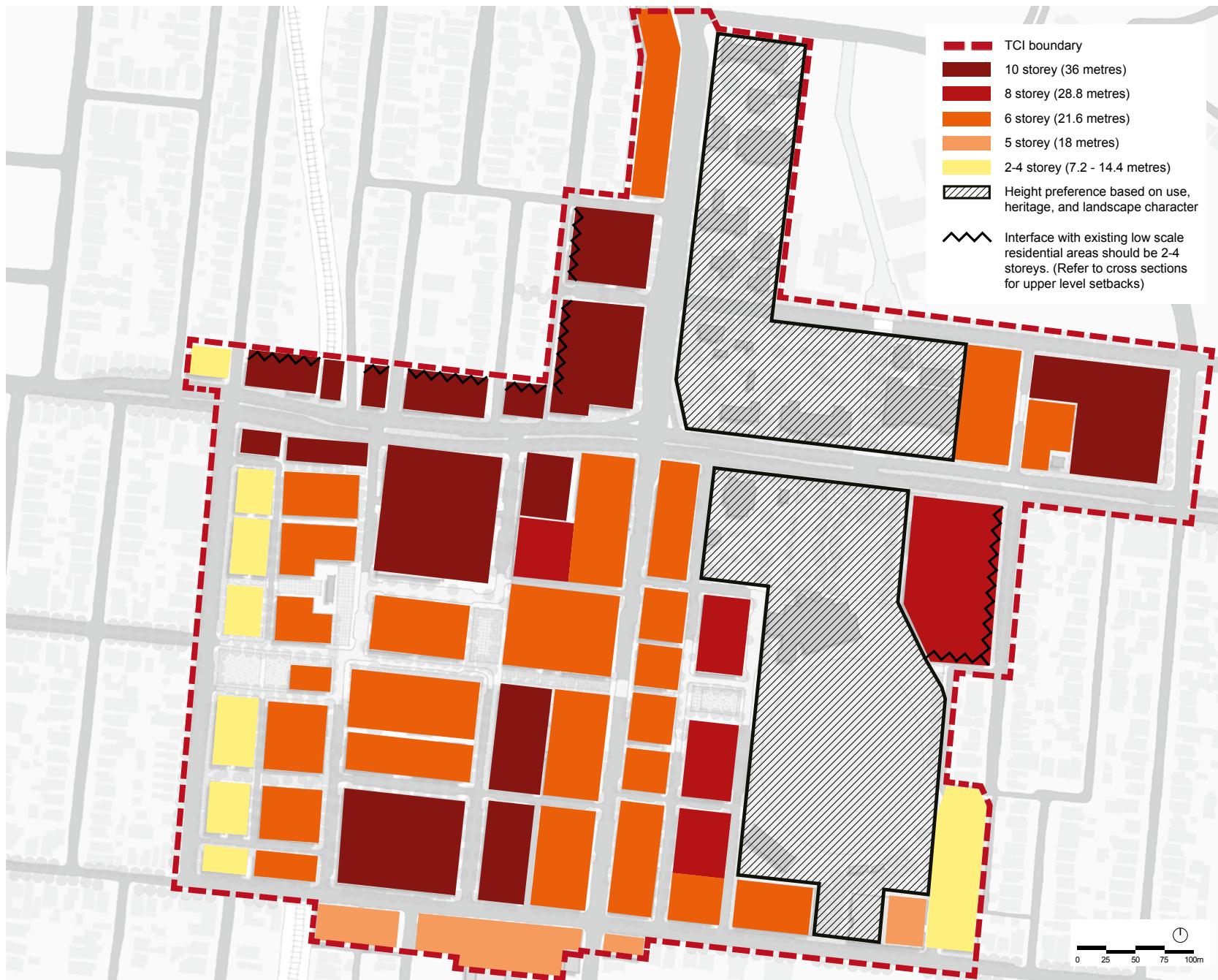


Figure 3: Building Heights (for upper level setbacks, refer figures 4 and 5)



Figure 4: Setback Section Locations (refer figure 5 for cross sections)

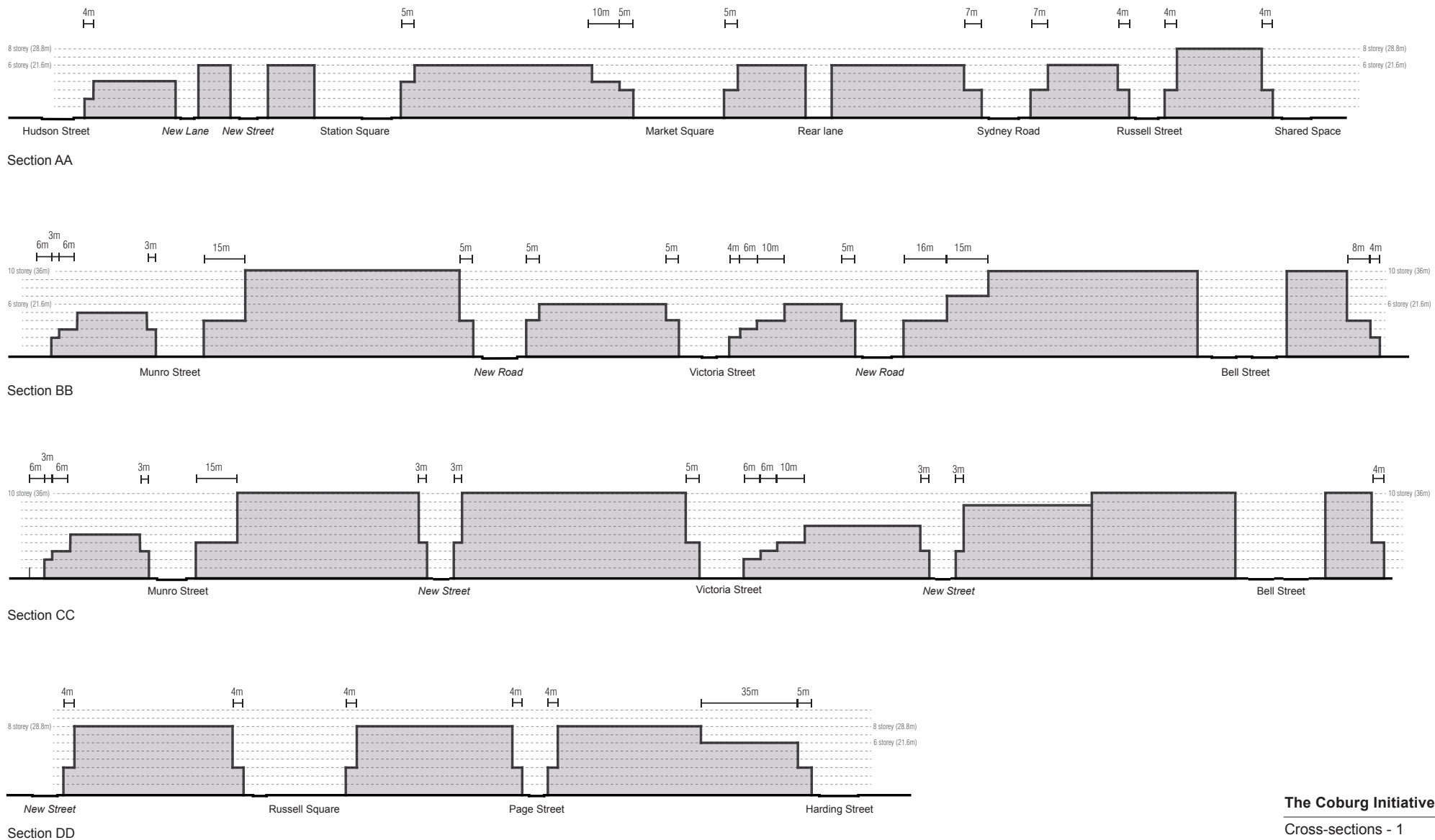
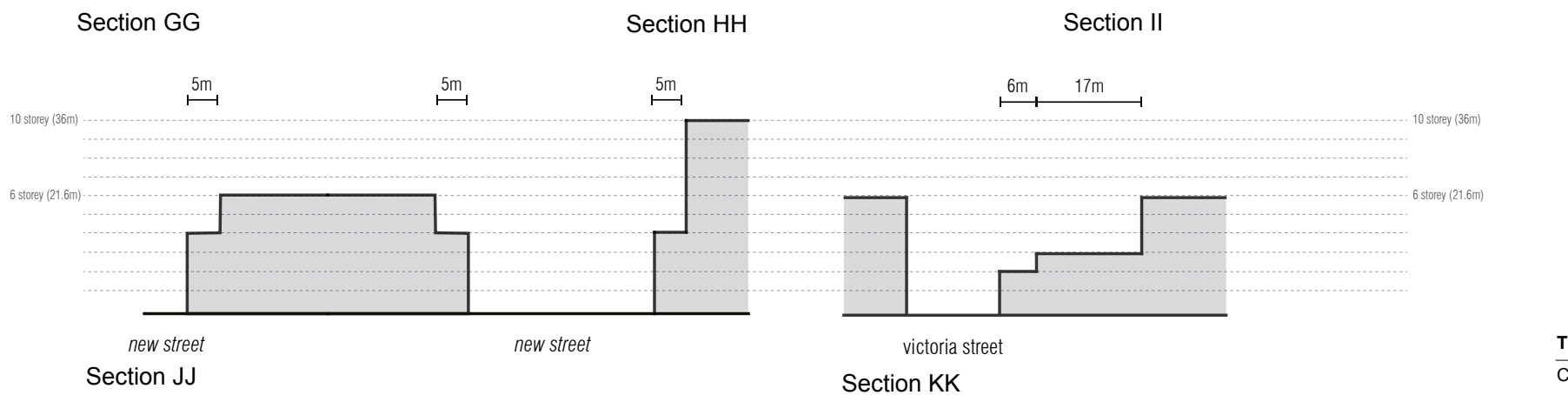
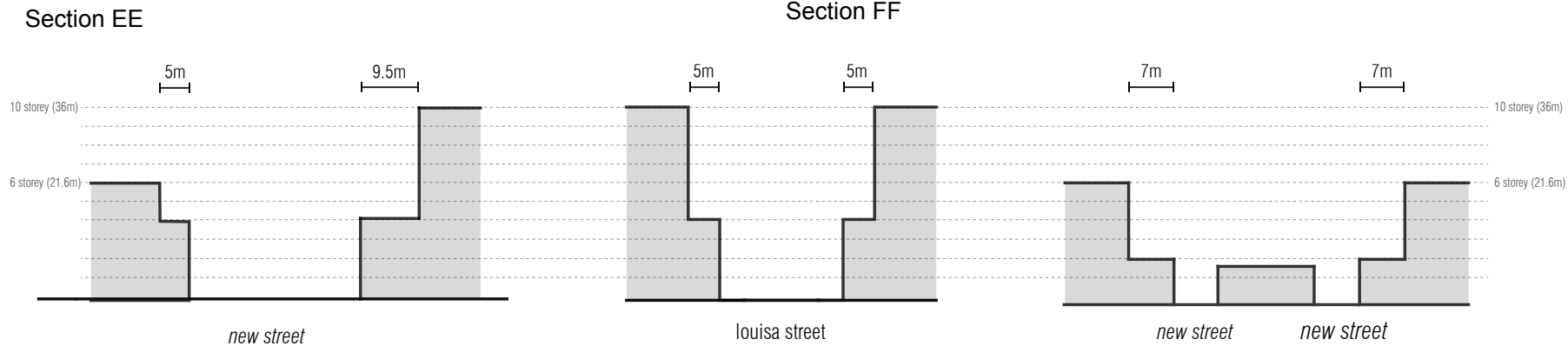
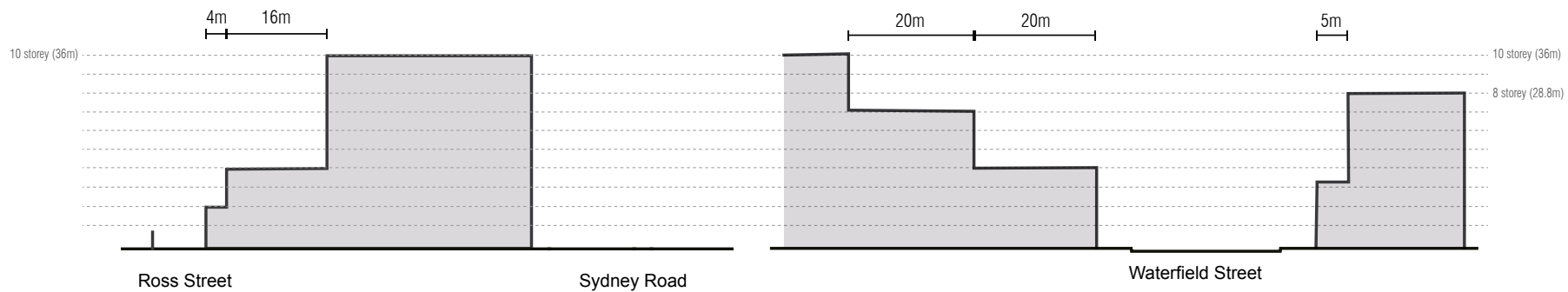


Figure 5: Cross sections to show upper level setbacks (refer figure 4 for location of cross sections)

Note 1: Setback distances are measured from the property boundary. Balconies may overhang the setback and road reserve by up to 1m, if it can be demonstrated they make a positive contribution to the overall façade composition and do not adversely impact on the street or laneway dimensions.

Note 2: These cross sections do not illustrate all upper level setbacks within the TCI area. The cross sections are intended to be replaced with 3D setback diagrams to illustrate all upper level setbacks. In the meantime, if you require clarification, contact Council.



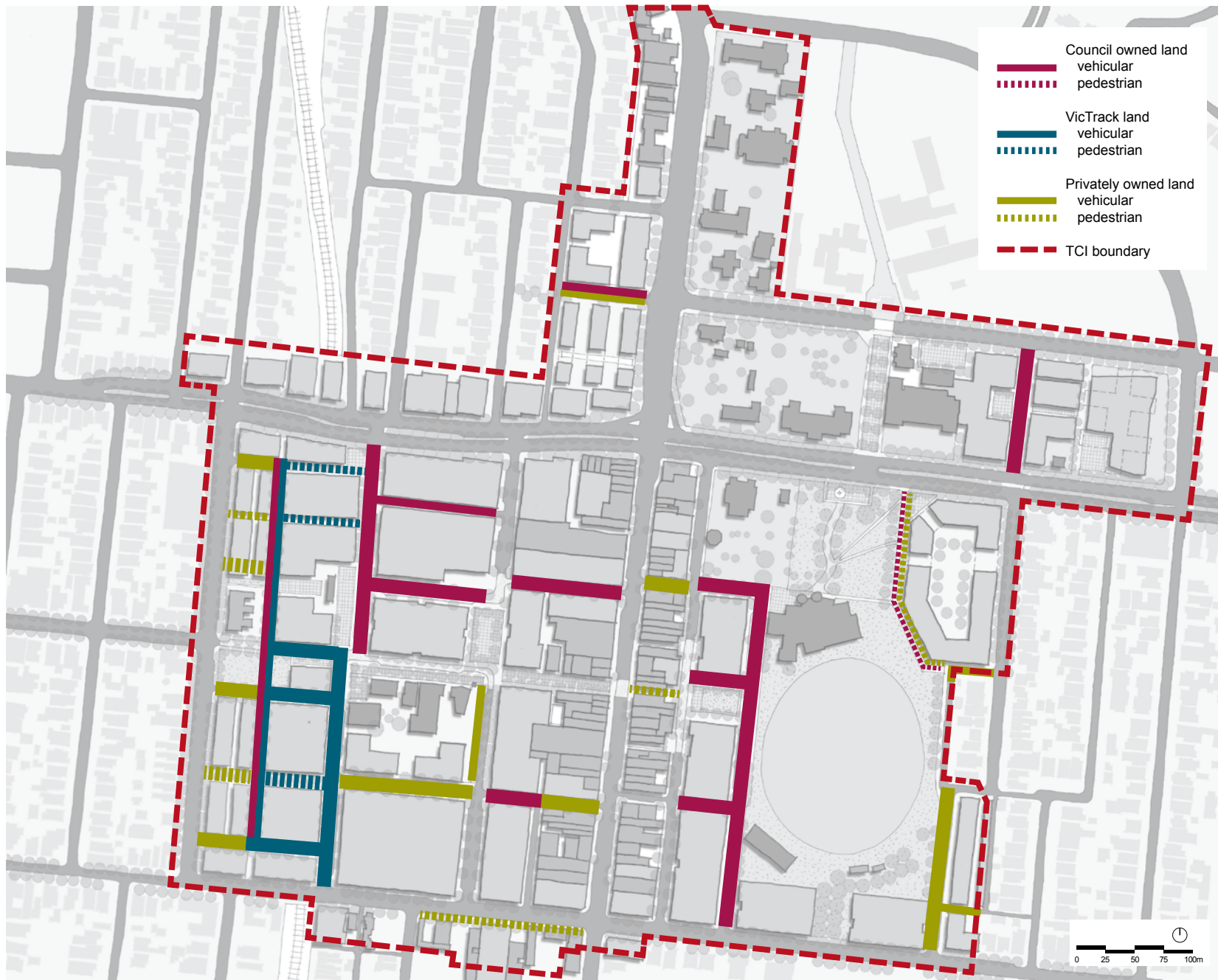


Figure 6: New Streets and Pedestrian Links

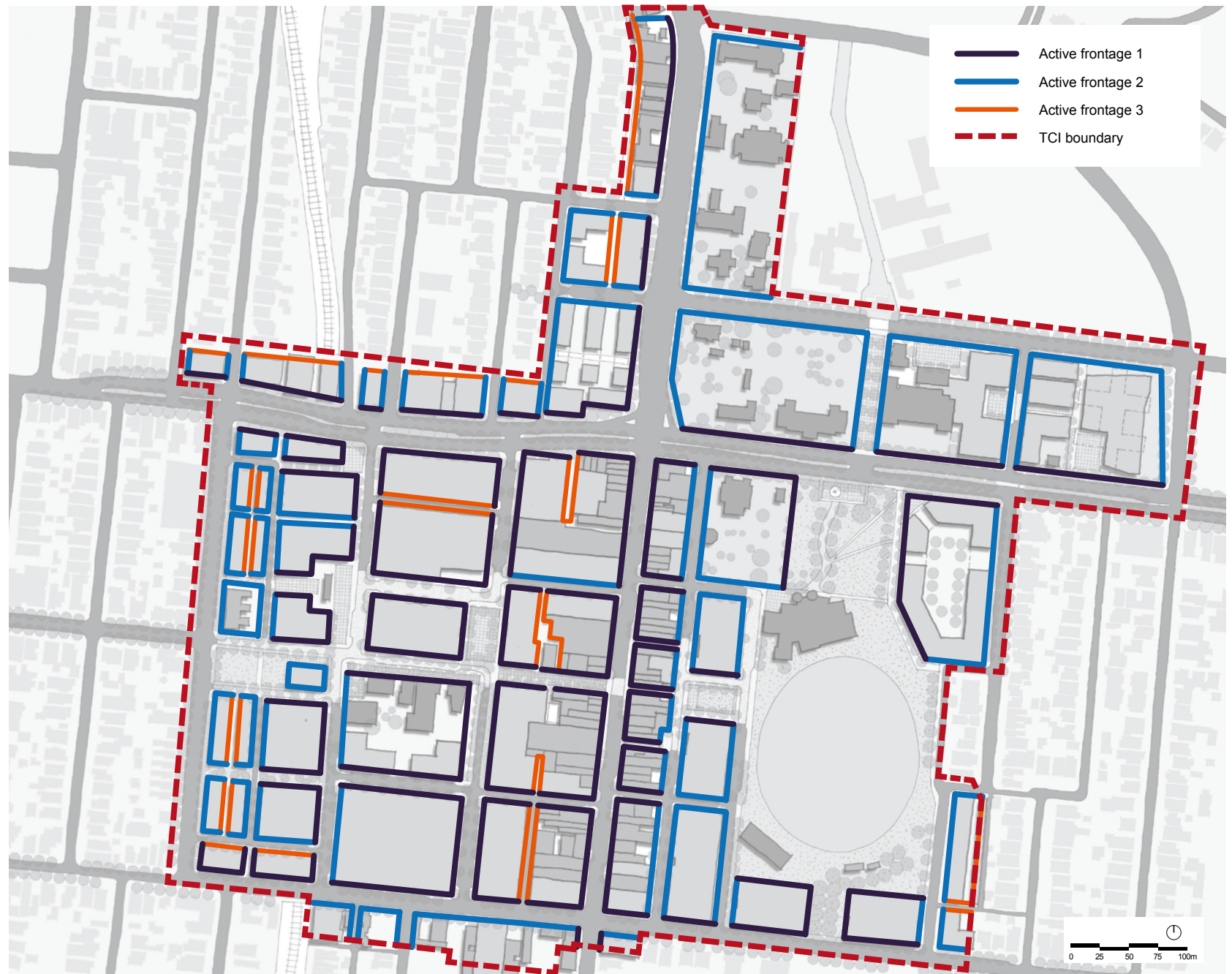


Figure 7: Active Frontages (for description of active frontage types, refer Table 1)

Table 1: Active Frontages (to be read in conjunction with Figure 7 Active Frontages)

Active Frontage 1

No vehicle access from this frontage.

1A) Retail/Commercial uses at ground floor:

- > No ground floor front setbacks; build to street edge.
- > Pedestrian entrances to retail/commercial premises to be located along this frontage.
- > Clear glazing to street frontages, including:
 - A display window and/or entrance, measuring at least 80% of the width of the street frontage of each individual premises used for shop or food and drink uses.
 - A display window and/or entrance, measuring at least 60% of the width of the street frontage of each individual premises used for other commercial uses.

1B) Residential uses at ground floor:

- > Ground floor setbacks to reflect existing front setbacks, to retain and enhance green edge to street.
- > Individual entry doors to ground level dwellings to create a residential address to the street.
- > No, or low visually permeable front fencing.

1C) Civic and community uses:

- > Existing green edge and landscape character should be maintained

Active Frontage 2

Vehicle access permitted if no other alternative.

- > Vehicle access may be located along this frontage if no other alternative.
- > Vehicle access should be in the form of a single vehicular cross-over and the width of the cross-over should be minimised.
- > The remainder of frontage to be treated in accordance with relevant Active Frontage 1.

Active Frontage 3

Vehicle access laneway.

- > All vehicle access, loading facilities and building service access to be located along frontage, to avoid use of pedestrian and retail frontages for vehicular access.
- > Minimise the number of vehicle crossovers.
- > Vehicle access points should be separated from pedestrian access points.
- > Secure car parks with automatic, semi-transparent security gates.

Table 2: TCI Built Form Guidelines

Note. Environmentally Sustainable Design (ESD) is specifically excluded from this table but should be considered in conjunction with these guidelines. For ESD objectives and guidelines, refer Section 6 and Table 5.

Interface with Public Realm

Objectives	Guidelines
Active Frontages > To ensure building frontages contribute to the liveliness, interest, comfort and safety of adjacent streets and public spaces.	> Active frontages should be provided in accordance with Table 1 Active Frontages and Figure 7 Active Frontages. > New buildings should be built to the front boundary, unless otherwise specified. > Provide activities at ground floor that spill out onto the street and enliven the public realm, in accordance with Section 3.0 Land Use and Section 5.0 Precinct Guidelines. > Building frontages should be predominantly parallel with street boundaries to reinforce or create a strong built form definition of the street. > Maximise ground level windows and pedestrian entrances. > A fine grain of shopfronts, other commercial premises and/or residential frontages should be provided. > Pedestrian entries into buildings should be clearly visible, directly face the street and provide weather protection. > Distinguish residential entries from retail and commercial entries with features such as awnings and/or other detailing. > Provide design features such as balconies at upper levels along the street frontage and to other public spaces to encourage activity and casual surveillance of the street. > Consider illumination of building facades, including main entries and any architectural features. All light sources should be directed downward. > Avoid creating blank walls, large service areas, car parking, co-located or continuous garage doors along ground level frontages.
Canopies and Weather Protection > To provide shelter for public streets.	> Encourage pedestrian activity on streets by providing awnings to retail strips and residential buildings, where appropriate, which: - Provide continuous awnings along all commercial frontages and key pedestrian walking routes; - Where there is an existing pattern of awnings, complement the existing height, depth and form of awnings; - Provide awnings over pedestrian entrances to residential frontages; - Provides sufficient protection for sun and rain; - Contribute to the legibility of the development and amenity of the public domain by locating awnings over building entries; - Enhance safety for pedestrians by providing under awning lighting.
Safety and Security > To ensure new buildings enhance safety and security of the public realm and within the site.	> Provide a mix of uses, particularly at ground level, to add vitality at different times of the day and night. > Clearly define boundaries between public and private spaces to avoid ambiguity using landscaping and/or built edges. > Avoid creating alcoves and leftover spaces with poor surveillance. Recesses in ground floor frontages should be less than 300mm deep to avoid potential hiding places. > Provide clear glazed windows at ground level to allow for casual surveillance of adjoining external spaces. > Provide lighting under fixed verandahs and awnings to ensure that the footpath is adequately lit. > External public and communal spaces, such as building entries, parking areas and paths, should be well lit and clearly visible to provide casual surveillance. > Entrance foyers should contain an easily visible intercom system. > Design carports, underground car parking, entrance hallways and other internal communal spaces so that the whole area can be viewed before entering. > Public or communal open spaces provided in or adjacent to the development should be substantially fronted by dwellings and/or commercial premises. > Landscape design should promote casual surveillance and perceptions of safety by avoiding dense planting in ground level frontages.

Objectives	Guidelines
Building Appearance > To encourage high quality, contemporary architecture. > To ensure buildings provide visual interest to the street. > To ensure buildings enhance and maintain the legibility of the neighbourhood.	> Detailing and finishing of building facades should be contemporary in style using, for example, contemporary elements, details and finishes that blend sensitively with the building's surrounds. > Building facades should incorporate relief to ensure visual interest by, for example, incorporating minor projections, using voids, modulating large forms and providing a variety of recesses. > Where opportunities for windows are reduced on west and south facades due to the employment of energy efficiency measures, use other design options to offer visual relief such as recesses, projections, material and colour variation. > Avoid highly reflective materials and colours on external walls that adjoin the public realm. Intersperse other materials with reflective or shiny surfaces to reduce the negative effects of highly reflective glass. Sheer curtain walls or other expanses of reflective glass are discouraged. > Design roof tops to conceal lift over-runs, plant and communication equipment. > Ensure the details of parts of buildings that are highly visible to pedestrians are designed at a very fine scale. > Buildings on corner sites should emphasise the corner section by being built to the street alignment and incorporating taller, distinctive architectural elements. > Minimise blank walls. > Use external lighting to enhance the design. > Integrate signage and graphics within the building design. > Air conditioning and heating units should not be visible from the public realm." > Weather protection should be provided over adjoining footpaths by including canopies/awnings that integrate with the overall streetscape. > Car park areas should be located in basement levels or, if located above ground, ensure car parks are concealed from view and 'sleeved' by other uses. Half basement car parks are not supported in Precinct 1 (core precinct).

Offsite Impacts

Objectives	Guidelines
Overshadowing > To ensure new buildings allow good sun penetration to public spaces. > To recognise the different overshadowing constraints of different public spaces. > To allow adequate daylight and sunlight into neighbouring properties. > To recognise that the quality of residential amenity in the TCI area is inherently different to, and should not be compared with, amenity expectations of a traditional residential area.	> Overshadowing of key public spaces should be consistent with the following overshadowing standards: - Category 1 (Civic Square Market Site) - No more than 1/2 the space to be in shadow at any time between 10.30am and 2.30pm (4hrs) on 21 June (Winter Solstice). - Category 1A (Bridges Reserve) – No more than 1/3 of the space to be in shadow at any time between 10.30am and 2.30pm (4hrs) on 21 June (Winter Solstice). - Category 2 (Vic Mall) - No overshadowing of the southern footpath (within 3m from the property boundary) between 11.00am and 2pm (3hrs) on 21 June (Winter Solstice). - Category 3 (Civic Square Russell Street Site, Civic Square Bob Hawke Centre Site, Station Square) - No more than 1/3 of the space to be in shadow between 10.30am and 2.30pm (4hrs) on 21 March / September (Equinox). > Maintain daylight access to adjoining habitable room windows. > At least 25% of adjacent residential private outdoor spaces should receive a minimum of 5 hours direct sunlight between 9am and 3pm on 22 September each year. > Where possible, development should avoid overshadowing existing solar panels on other properties, unless alternative solutions can be implemented (e.g. taking full financial responsibility for connecting affected properties to an alternative renewable energy source).

Objectives	Guidelines
Overlooking > To limit direct views into the private open space and habitable rooms of existing dwellings, relative to the reasonable privacy expectations of living in a Principal Activity Centre. > To recognise that the quality of residential amenity in the TCI area is inherently different to, and should not be compared with, amenity expectations of a traditional residential area.	> Minimise direct overlooking of the main internal living areas and private open space of neighbouring dwellings through: - building layout; - location and design of windows and balconies; - landscaping; and - separation by distance. > For development adjacent to the Residential 1 Zone, a habitable room window, balcony, terrace, deck or patio should be located and designed to avoid direct views into the secluded private open space and habitable room windows of any existing dwelling in the R1Z, within a horizontal distance of 9m, as per ResCode standards. > Minimise the use of screening devices to avoid overlooking. Where screening is used, it should integrate within the design of the building. Total reliance on screening devices is strongly discouraged. Consider the following design suggestions to minimise overlooking of rooms and private open spaces of adjacent apartments: > Using balconies to screen other balconies and any ground level private open space > Separating communal open space, common areas and access routes through the development from the windows of rooms, particularly habitable rooms > Changing the level between ground floor apartments and their associated private open space, and the public domain or communal open space > Off setting windows of apartments in new development and adjacent development windows > Recessing balconies and/or using vertical fins between adjacent balconies > Using solid or semi-solid balustrades to balconies > Using louvres or screen panels to windows and/or balconies > Using fencing > Using vegetation as a screen > Incorporating planter boxes into walls or balustrades to increase visual separation between areas > Using pergolas or shading devises to limit overlooking of lower apartments or private open space.
Noise and Air Quality > To minimise the impact of noise upon adjacent dwellings and the immediate public realm. > To minimise impacts on air quality. > To recognise that the quality of residential amenity in the TCI area is inherently different to, and should not be compared with, amenity expectations of a traditional residential area.	> Reduce and treat air, water and soil pollutants at the source. > Minimise noise levels from plants and equipment (e.g. by locating mechanical plants away from private open space areas and noise sensitive rooms in adjacent buildings). > Locate servicing equipment so that it will not have an unreasonable noise and air quality impact on adjacent properties and the surrounding public realm. For example, exhaust vents should be located away from street frontages. > Locate servicing equipment away from openable windows and locations where it is likely to cause a noise or air nuisance to occupants of the building or adjacent buildings. > Provide adequate soundproofing where noise levels are expected to exceed ambient levels. > An acoustic report is required to be submitted to provide information on noise levels and recommendations for attenuation measures (refer to section 12. Application Requirements). > Note, this section is concerned with off-site impacts, refer to Internal Amenity - noise section below for measures to protect occupants of building against excessive noise.

Internal Design

Objectives	Guidelines
Wind Protection > To ensure tall buildings do not create adverse wind effects.	> Use stepped building forms and articulation of the building mass to reduce wind turbulence at ground level. > Provide protection for pedestrians in public and private spaces from wind down drafts and wind tunnel effects. > A wind impact assessment may be required to be submitted to provide an assessment of the building's contribution to adverse wind effects and to recommend measures for attenuation (refer section 12. Application Requirements).
Adaptable Use > To maximise the building's ability to accommodate a range of uses over its lifetime.	> Encourage minimum floor to floor heights of 3.6m for all levels above ground (i.e. excluding basement car parks). > Provide effective light courts for deep plan buildings. (For guidance on dimensions for light courts, refer to 'Internal Amenity – daylight' section.) > Design buildings so that they receive natural light and ventilation. > Maximise potential pedestrian access points into buildings. > Consider adaptable apartment layouts to accommodate changing demographics, life stages, cultural needs and the needs of dependent persons (e.g. the ability for adjacent small apartments to be consolidated to form one larger apartment). > Ensure commercial spaces can be adapted to suit different retail and office uses or conversion to residential uses.
Internal Circulation > To facilitate safe and convenient pedestrian access.	> Key access routes must have good visibility and be well lit. > Pedestrian access to occupancies within the building must be provided directly from both the street and the car park. > Provide safe and convenient access throughout the development, including: - the main entrance and exit; - all public areas; - all shops, restaurants and other uses of a retail or service nature; - all floors of all residential buildings; and - lifts and car parks. > Increase amenity and safety in circulation spaces by: - Providing generous corridor widths and ceiling heights, particularly in lobbies, outside lifts and apartment entry doors - Providing appropriate levels of lighting, including the use of natural daylight where possible - Minimising corridor lengths to give short, clear sight lines (see last dot point below) - Avoiding tight corners - Providing adequate ventilation > Design buildings with multiple cores to: - Increase the number of entries along a street - Increase the number of vertical circulation points (e.g. lifts and stairs) - Limit the number of units off a circulation core in a single level (see last dot point below). > Articulate any longer corridors. Design solutions may include: - Utilising a series of foyer areas - Providing windows along or at the end of a corridor > In general, where apartments are arranged off a double loaded corridor, the number of units accessible from a single core/corridor should be limited to 8. Exceptions may be considered where developments can demonstrate a high level of amenity for common lobbies, corridors and dwellings (e.g. cross over and dual access apartments).

Objectives	Guidelines
Accessibility and Adaptability (for limited mobility) > To ensure buildings are designed to provide dignified and independent access for all and meet best practice standards for adaptability and accessibility for people with limited mobility.	> In developments that include 10 or more dwellings, at least 20% of dwellings should be adaptable and designed in accordance with the requirements of AS4299 (Class C). This includes the following features: a clear path from the street to a level entry; wider doorways and halls; a toilet suitable for people with limited mobility on entry level; reinforced bathroom/toilet walls so grab rails can be fitted; and stepless shower features or a floor slab that allows easy and inexpensive installation at a later stage. The remainder should be visitable by providing at least one wheelchair accessible entry and path of travel to the living area and to a toilet suitable for people with limited mobility. > Public and commercial buildings should reflect best practice in accessibility. Buildings should meet the objectives of the Disability Discrimination Act (1992) and the requirements of the Disability (Access to Premises – Buildings) Standard 2010, as required by the Building Code. > The common areas of multi dwelling developments should meet the spatial and access requirements of the Disability (Access to Premises – Buildings) Standard 2010. This includes accessible paths of travel, unisex accessible toilets (where applicable) and accessible facilities (e.g. gymnasium). > One disabled car space per adaptable dwelling should be provided, located within easy access to lifts, pedestrian pathways and the premises they serve. > An accessibility report is required to be submitted to demonstrate that the above guidelines have been met (refer to section 12. Application Requirements).
Internal Amenity - Daylight and ventilation > To ensure that habitable rooms receive adequate natural light and ventilation. > To ensure adequate sunlight into secluded private open spaces and onto the main living room windows of new dwellings. > To recognise the constraints of providing sunlight access in some locations due to existing lot orientation (e.g. Sydney Road).	> Locate windows to facilitate cross ventilation. > Incorporate internal courtyards and light courts to improve access to natural light and ventilation. Where lightwells are used: - Relate lightwell dimensions to building separation. For example, if non-habitable rooms face into a lightwell under 12m high, the lightwell should measure 6x6m. Where smaller dimensions are proposed, satisfactory acoustic privacy, visual privacy and daylight access must be demonstrated. - Conceal building services and provide appropriate detail and materials to visible walls. - Ensure lightwells are fully open to the sky. > Limit the depth of single-aspect dwellings. > Maximise access to direct light and air to all habitable rooms. Avoid 'borrowed' light and air, particularly in ventilating bedrooms. Where light is borrowed from another room, ideally it should be taken from the principal living area, rather than from corridors or other bedrooms. The following dimensions are suggested: - Single aspect apartments should be limited in depth to 8m from a window. - The back of a kitchen should be no more than 8m from a window. - The width of cross-over or cross-through apartments over 15m deep should be 4m or greater to avoid deep narrow apartment layouts. - Consider use of mezzanine and 2 storey apartments to facilitate daylight access and ventilation to all habitable rooms in single aspect apartments. - Building depths which typically support natural ventilation range from 10 to 18m. - As a general guide, 60% of units should be naturally cross ventilated. > Buildings not meeting the guidelines listed above, should demonstrate how satisfactory daylighting and natural ventilation will be achieved, particularly in relation to habitable rooms.

Objectives

Guidelines

Internal Amenity - Noise

- > To ensure that all occupants are protected from high levels of external noise sources from both neighbours within the building and on nearby sites.
- > Locate noise sensitive rooms and secluded private open space areas away from external noise sources. Separate active communal recreation areas, parking areas, vehicle accessways and service equipment from bedrooms.
- > Use noise resistant materials and construction methods, for example double glazing.
- > Protect noise sensitive rooms and secluded private open space areas with appropriate noise shielding techniques, for example inter-apartment floor and wall construction techniques to reduce noise transfer horizontally and vertically.
- > Also refer to relevant ESD guidelines for Indoor Environment Quality (Table 5).

Bicycle Access and Parking

- > To ensure that bicycle parking provision for building occupants and visitors is sufficient and meets the TCI sustainable transport objectives (refer section 7).
- > To ensure convenient, safe and efficient bicycle movements and connections within the development and to the street network.
- > To ensure end of trip facilities are provided.
- > Maximise the provision and convenience of bicycle parking.
- > Bicycle parking should be provided for employees, residents, visitors and customers, in accordance with the rates outlined in section 7. Sustainable Transport – Bicycle Parking.
- > Provide shower and change facilities suitable to the needs of different occupants and with convenient access to associated bicycle spaces.
- > A bicycle space for an employee or resident must be provided either in a locker or at a rail in a compound, and designed in accordance with the existing requirements of the Planning Scheme.
- > A bicycle space for a visitor or customer must be provided at a bicycle rail, clearly visible and accessible to the public, and designed in accordance with the existing requirements of the Planning Scheme.
- > Bicycle signage that directs cyclists to bicycle facilities should be provided.

Objectives	Guidelines
Vehicle Access and Parking > To ensure that car parking provision for building occupants and visitors meets the TCI sustainable transport objectives (refer section 8). > To ensure safe and efficient vehicle movements and connections within the development and to the street network. > To ensure that the design of parking and access areas is safe, practical, attractive and can be easily maintained. > To ensure car parking areas are designed to allow adaptation to other uses in future.	> Apply reduced car parking rates and allow for dwellings with no car parking allocation. Car parking should be provided in accordance with the objectives and requirements outlined in section 8. Sustainable Transport – Car Parking. > One disabled car space per adaptable dwelling should be provided, located within easy access to lifts, pedestrian pathways and the premises they serve. > Locate car park areas in basement levels or, if located above ground, ensure car parks are concealed from view and ‘sleeved’ by other uses. Half basement car parks may be screened (e.g with landscaping). Refer Building Appearance guidelines above. > Encourage multi use of car parking spaces. Where development contains a mix of uses, car parking areas should be shared between day time and night time demand. > Encourage the design and construction of car parking areas to enable future adaptation for other uses. Above ground car parking areas should have a minimum floor to floor height of 3.6m to allow adaptability to other habitable or commercial uses. > Consider the provision for electric vehicles (e.g. docking stations) and car sharing schemes. > Minimise the number of vehicle crossovers. > Locate vehicle access in accordance with Table 1 Active Frontages and Figure 6 Active Frontages. > If laneways are used, they should be constructed to a standard to the satisfaction of the responsible authority. > Relocate poles away from vehicle crossings. > Separate vehicle access points from pedestrian access points. > Provide safe and convenient pedestrian access between car parking areas and pedestrian entries into the building. > Locate shared accessways and car parks at least 1.5 metres from the windows of habitable rooms in adjoining dwellings. This setback may be reduced to 1 metre if there is a fence at least 1.5 metres in height or if window sills are at least 1.4 metres above the accessway. > Secure car park entries with automatic semi-transparent security gates. > Provide clear and open site lines within car parks. > Avoid tandem spaces unless associated with a single occupancy. > Naturally ventilate basement car parks where possible. However, as the majority of car parking will be internalised, ventilation of car parking should be provided using low energy solutions if natural ventilation is not possible. > Within car park areas, provide directional signage to lifts, stairs and exit points. > All parking areas, including entry and exit points, should be well lit. > Ensure adequate provision for loading and unloading of goods and services. > Provide access for service, emergency and delivery vehicles.

Objectives

Guidelines

Site Facilities

- > To provide site facilities which are adequate and convenient for occupants needs and which are practical, attractive and easily maintained.
 - > To ensure common property is functional and capable of efficient management.
 - > To provide adequate storage facilities for all dwellings.
- > Provide adequate mailbox facilities, including a newspaper holder. When providing for mail deliveries, consider a secure, weather-protected location, at or close to the building entry, with easy access for postal deliveries including parcels and mail boxes integrated into the overall entry/foyer design, to be visually unobtrusive and secure.
 - > Blend garbage and mailbox facilities within development to avoid visual clutter.
 - > Incorporate telecommunications infrastructure into the design of development.
 - > Storage facilities should be of adequate size, functional, secure and waterproof (e.g. lockers in basement car parks). In addition to kitchen cupboards and bedroom wardrobes, provide accessible storage facilities at the following rates:
 - Studio, 1 and 2 bedroom apartments: 3m³
 - 3+ bedroom apartments: 6m³.
 - > Ensure storage is able to accommodate larger items such as sporting equipment (skiing, surfing, golfing etc)
 - > Ensure that storage separated from apartments is secure for individual use.
 - > Garbage and recycling bin enclosures should be: of adequate size; located for convenient access by residents and collection vehicles; constructed with an impervious floor; and screened from view of the street. A Waste Management and Disposal Plan is required (see section 12. Application Requirements).
 - > Provide space for cleaning and servicing equipment in common areas.
 - > Conveniently locate all public infrastructure to enable efficient maintenance without disrupting the operation or use of the building.
 - > Ensure emergency services have easy access, including water supply for fire fighting and access to the building for emergency personnel.

Open Space and Landscaping

Objectives	Guidelines
Private and Communal Open Space > To provide sufficient, sunlit and secure open space for the reasonable recreation needs of residents.	> Open space should be clearly defined as private, communal or public. > Ensure private open space is usable and provides reasonable levels of amenity (e.g. upper level balconies can be adversely exposed to high winds, and in some cases it may be more appropriate to consider providing communal open space at ground or roof top levels). > Balconies should have a minimum depth of 2m (to comfortably accommodate a table and two chairs). Generally, up to half the depth of the balcony (1m) may project into the road reserve or setback, if it can be demonstrated they make a positive contribution to the overall façade composition and do not adversely impact on the street or laneway dimensions. > Balconies must be drained to a legal point of discharge. > Balconies should not be used to house equipment and plant such as air conditioners, etc. > Orient private open space associated with dwellings to facilitate solar access and provide for maximum year round use. > Where dwellings are not provided with private open space, ensure that a substantial area of north east to north west facing openable windows and/or doors are provided so that habitable rooms receive direct sunlight and ventilation. > Where dwellings are not provided with private open space, ensure the provision of generous communal open spaces which are easily accessible from all dwellings. > Communal or shared open spaces should be functional and attractive. Ensure they are designed to be usable in a range of weather conditions at various times of the year and that the ongoing ease of maintenance is considered. > Consider the development potential of adjacent sites when locating open space areas. (e.g. do not undermine the development potential of adjoining sites by the location of private open space areas). > Maximise the use of roof top spaces for communal open space, incorporating 'green roof' landscaping (see Landscaping guidelines below).
Landscaping > To protect and enhance biodiversity. > To provide sustainable landscapes. > To encourage the planting of indigenous vegetation. > To encourage local urban agriculture. > To reduce the heat island effect and enhance and improve the micro-climate conditions of the TCI area. > Incorporate water sensitive urban design (WSUD) techniques into landscaping. > To enhance the appearance of the development.	> Use on-site landscaping to enhance and improve the micro-climate conditions of the development and precinct. > Landscaping should be used to maximise permeable surface area. > Allow for opportunities to grow fruit and vegetables in on-site communal and/or private open spaces. > Encourage landscape design and plant selection which minimises reliance on watering/irrigation and maximises use of indigenous and native plants. > Plantst should be chosen having regard to given conditions (e.g. exposed and windy roof tops). > Encourage podium and roof top gardens to minimise stormwater run-off and to provide thermal insulation. > Encourage green walls and green roofs for thermal insulation and reduction in the urban heat island effect. > Promote the detention and absorption of stormwater where practicable through use of permeable paving, pebble paths, lawns and gardens (recognising the limitations to this created by high density development, often incorporating basement car parking and extensive impervious areas). > Provide landscaping within setback areas to the street frontage, ground floor open space areas and outdoor car parking areas. > Use advance growth trees, where space permits. > Ensure the size of planters allows adequate soil depth and are provided with drainage and irrigation. > In designing landscapes, consider the ease and costs of ongoing maintenance. > Consider as appropriate, Moreland Landscape Guidelines and Technical Notes. > Also refer to relevant ESD guidelines for Integrated Ecology (Table 5).

5. Precinct Guidelines

The following role and requirements have been identified as specific to individual precincts within the TCI area. Further detail on the role, preferred uses and development yields is contained in the Economic Development Strategy.

The precinct boundaries are identified in Figure 2: Future Land Use Framework Plan.

Table 3: Precinct Requirements

Precinct 1: Station Precinct and Sydney Road (core precinct)

Role	Preferred heights (refer figures 3,4 & 5)	Other Specific Requirements
Mixed Use > Primary retail location on ground floor with office, community uses, and entertainment primarily provided above the ground floor. > Retail and hospitality activity should enhance the interface with public squares > Large format retailing should not adjoin public squares. > Apartment development and visitor accommodation that can sustain low car dependency to be provided above ground level. > Strong focus on uses that support an 18 hour economy and that provide comprehensive daily/weekly shopping needs. > Until grade separation occurs, land uses fronting Hudson Street should generally conform to the predominantly residential nature of this street.	5-10 storeys (refer height map) 2-4 storeys along Hudson Street	> Extend the hours of activity within the precinct beyond daytime business hours. > Enhance and reinforce the character of the Sydney Road corridor (horizontal, 2-3 storey Victorian scale) by establishing strong podium forms and setbacks to upper levels. > Achieve an enhanced presence of community facilities including the redevelopment of the library as an information and learning hub. > Encourage the development of the rear of the existing residential properties on the east side of Hudson Street to provide passive surveillance and increased activity to existing laneways, pedestrian paths and public park interface. > Ensure that new residential uses respond to adjacent noise sources, particularly the Upfield railway line. > Open up views to the station. > Ensure development fronting Hudson Street responds to the low scale residential nature of this street. > Half basement car parks are not supported in the core precinct. Car parking should be located in basement levels or, if located above ground, should be concealed from view and 'sleeved' by other uses.

Precinct 2: Bell Street North

Role	Preferred heights (refer figures 3,4 & 5)	Other Specific Requirements
Mixed Use > Secondary retail location more suited to retailing that is destination or single purpose trip in nature > Showroom and office on ground floor, and residential and office above. > Emphasis on larger format showrooms utilising main road exposure, and apartment development that can sustain low car dependency.	2-10 storeys (refer height map) 2-4 storeys at rear	> To encourage a range of commercial uses that complement the adjacent activity centre core, including medical centres, business services, offices and restricted retail uses. > To maintain and enhance a vibrant streetscape, range of shops, cafes and restaurants to Sydney Road and Bell Street.

Precinct 3: Civic, Community, City Oval and Environs

Role	Preferred heights (refer figures 3,4 & 5)	Other Specific Requirements
Mixed Use > Primary community, education and recreation uses to provide cultural and spiritual hubs, an active recreation hub and complementary uses to the regional library to be established in Precinct 1 in order to complete an information and learning hub. > It is not envisaged that there will be substantial change in these areas and the emphasis is to strongly support the existing religious, education and local government activities particularly with regard to the town hall and the existing recreation hub.	Heights determined by heritage and landscape character features.	> To maintain the established church, educational and municipal uses. > To ensure built form responds to the heritage significance and landscape character of the area. > To maintain and enhance the established pattern of free-standing buildings in open landscaped grounds. > To ensure new uses are complementary to the established uses, with any residential limited to potential residential development in association with the established church and community uses. > Better utilise the land for a variety of uses to maximise community benefit. > Develop the town hall complex as an intensively used community facility. > To integrate the churches, the former Pentridge Prison, and the Sydney Road tram line into a cohesive high quality pedestrian environment. > The cluster of church buildings fronting Sydney Road will be enhanced as a significant historical landscape. > New and infill development must maintain the established setback from the Bell Street frontage.

Precinct 4: Russell Street and Environs

Role	Preferred heights (refer figures 3,4 & 5)	Other Specific Requirements
Mixed Use > Primary residential location with secondary roles for retail on ground floor that supports residential activity (such as dry cleaners, laundromats, newsagents, minor pharmacy, car hire and home based business activity such as cafes, stationery supplies and printing) and minor office activity. > Apartment development that accommodates a wide range of household types and home office activity. > Minimal retail and hospitality activities should enhance public squares and park spaces.	2-8 storeys 2-4 storeys along Rodda St and other interfaces with Residential 1 Zone.	> New buildings should provide for surveillance and activity to Bridges Reserve, Coburg City Oval, and existing and proposed pedestrian paths. > New fences to boundaries with Bridges Reserve and Coburg City Oval must be low, open type fencing. > In appropriate locations, roadways and pedestrian paths should be used as the interface with Bridges Reserve and Coburg City Oval. > To capitalise on and enhance views and vistas to the parklands and heritage buildings within the precinct. > To provide a transition and stepping down in built form to respond to the existing low scale residential areas to the east. > To create an east–west link between Bridges Reserve and Rodda Street. > To improve the amenity of the existing pedestrian link around the eastern side of Coburg City Oval.

Precinct 5: The Boulevard and Environs

Role	Preferred heights (refer figures 3,4 & 5)	Other Specific Requirements
> Primary health and office location.	6-10 storeys (refer height map)	> There is considerable scope to include additional office in association with the civic centre that can also support the activities of a major private hospital such as John Fawkner and complete the range of activities that establish a health and wellbeing hub. > As a landmark building the hospital will mark the gateway to Central Coburg from the east.

6. Environmentally Sustainable Development

6.1 Objectives

Carbon Neutral Development

- > To ensure the efficient use of energy.
- > To reduce energy peak demand.
- > To reduce total operating greenhouse gas emissions.

Sustainable Water Management

- > To ensure the efficient use of water and reduce potable water use.
- > To maximise the use of alternative water sources (e.g. greywater, stormwater).
- > To reduce the impact of stormwater runoff and improve the quality of stormwater runoff.

Sustainable Resource Use

- > To minimise the materials purchased and consumed during construction and operation.
- > To minimise the environmental impacts of materials purchased and consumed during construction and operation.
- > To minimise materials going to landfill during construction.
- > To eliminate materials going to landfill during operation.
- > To ensure long term reusability of building materials.

Indoor Environment Quality (as part of a Healthy City)

- > To achieve a healthy indoor environment quality for the wellbeing of building occupants.
- > To reduce the impact of noise pollution.

Sustainable Transport

- > To reduce the number of car trips to and from the precinct.
- > To reduce 'automobile dependence' within the precinct.
- > To increase the number of residents and workers utilising walking, cycling and public transport.
- > To reduce greenhouse gas emissions associated with transport.

Integrated Ecology

- > To improve urban ecology outcomes.
- > To consider the impacts of climate change and reduce urban heat island effect.
- > To increase the planting of indigenous vegetation.
- > To increase local urban agriculture.

6.2 Requirements

- > The following minimum standard of performance (or agreed equivalent) is required to demonstrate that the above objectives have been achieved (i.e. international best practice):

Table 4: ESD Performance Standards

Type of development	Guidelines
Residential uses > 1 or more dwellings > Buildings and works creating 50m² or more of additional gross floor area (excluding outbuildings)	> Green Star 6 star > Best practice stormwater treatment
Non-residential uses > With gross floor area of more than 500m² > Alterations and additions of more than 1000m²	> Green Star 6 star > Best practice stormwater treatment
Non-residential uses > With gross floor area between 100m² and 500m² > Alterations and additions between 100m² and 1000m²	> Green Star 4 star > Best practice stormwater treatment

Note 1. Mixed use buildings are required to demonstrate the above performance standards for each relevant use.

Note 2. In the case of alterations and additions, the above performance standards apply only to the alterations and additions.

- > In addressing the above objectives and performance standards, consideration should be given to the TCI ESD Guidelines, included in Table 5.
- > An ESD Management Plan is required to be submitted to detail compliance with the ESD objectives and performance standards (refer section 12 Application Requirements).

6.3 Implementation

- > Include ESD objectives, requirements and guidelines in the ACZ or LPPF of the Moreland Planning Scheme.

Table 5: TCI ESD Guidelines

Note. ESD features are expected to be integrated into the overall building design. Therefore, these guidelines should be considered in conjunction with the TCI Built Form Guidelines in Table 2, in the very early stages of building design.

Carbon Neutral Development

Objectives	Guidelines
> To ensure the efficient use of energy. > To reduce energy peak demand.	> All new buildings should achieve current international best practice for energy efficiency in design, construction and operation. > Proposals are encouraged to trial new and emerging technologies for energy efficiency, provided their on-going management and maintenance can be guaranteed. > Buildings should be sited and designed to minimise energy consumption and peak demand by: - Ensuring building orientation maximises passive opportunities for energy efficiency. Passive means should be used in preference to mechanical systems to maintain building ventilation, heating and cooling. - Orientating development's most used spaces (e.g. living rooms and work areas) to face north to take advantage of winter solar heat gain and natural light. - Ensuring window design and placement provides for effective passive heating and cooling. - Shading all windows from summer sun penetration. Options include horizontal projections, such as eaves, overhangs, awnings, pergolas, upper floor balconies or deciduous vegetation, and vertical devices such as blinds, shutters and awnings. - Encouraging reliance on natural daylight into internal spaces, including the use of light shelves; shaded skylights; light shafts; and daylight sensing control of electric lighting where appropriate. - Maximising opportunities for natural ventilation to reduce the need for mechanical heating, ventilation and air conditioning (HVAC), including: cross-ventilation through floors; inclusion of night-time purging to cool thermal mass; specialised inlet ventilation openings and solar chimney/ventilation shafts for outlet ventilation; the use of winter gardens to increase airflow; landscaping to aid in shading and cooling; car park ventilation. > Encourage occupant reduction in energy use through information systems with private and public display. > Design to prioritise walking in buildings (e.g. position stairs close to lifts to maximize stair use).
> To reduce total operating greenhouse emissions.	> In meeting energy needs, developments should either connect to local renewable energy generation infrastructure, or incorporate on-site renewable energy generation into the development (e.g. cogeneration – the on-site generation of heat and electricity in the same system), and/or use verified and approved 'green' power from the supply grid. > Innovative sources of renewable energy, such as solar thermal technologies and wind turbines should be considered for careful integration into the design. > Consideration should be given to offsetting on-site greenhouse gas emissions with off-site renewable energy generation.

Sustainable Water Management (including stormwater)

Objectives	Guidelines
> To ensure the efficient use of water and reduce potable water use. > To maximise the use of alternative water sources (e.g. grey water).	> Ensure the efficient use of water by installing high efficiency fittings, fixtures and appliances. > Provision should be made for the goal of 100% of rainwater and stormwater to be collected, treated and re-used on site (e.g. use rainwater and treated water for landscape and building control systems, toilet flushing, irrigation in shared open space areas, swimming pool water, etc.) > Encourage the re-use of grey water and black water. > Encourage landscape design and plant selection which minimises reliance on watering/irrigation by maximising use of indigenous and native plants and considering the principles of xeriscape (water efficient) gardening (in terms of planning, soil care, selection of plants, lawn care, irrigation, mulching and maintenance). > Encourage podium and roof top gardens to minimise stormwater run-off (and to provide thermal insulation). > Promote the detention and absorption of stormwater where practicable through use of permeable paving, pebble paths, lawns and gardens (recognising the limitations to this created by high density development, often incorporating basement car parking and extensive impervious areas). > Encourage the provision of appropriate on-site detention systems to reduce loadings on the stormwater system after heavy rains. > Ensure water sensitive urban design elements are incorporated into developments (e.g. bioretention). > Where available, developments should connect to local sustainable water management infrastructure (e.g. precinct scale third pipe scheme) > Encourage occupant reduction in potable water use through information systems with private and public display.
> To reduce the impact of stormwater run-off and improve the water quality of stormwater run-off.	> Encourage the use of pollutant traps to prevent garbage and other contamination entering waterways. > Ensure Construction Management Plans adequately address stormwater management and potential environmental impacts (refer Application Requirements in section 12).

Sustainable Resource Use (including Building Materials and Waste)

Objectives	Guidelines
> To minimise the environmental impacts of materials used by encouraging the use of materials with a favourable lifecycle assessment during operation and construction. > To minimise materials purchased and consumed during construction and operation. > To ensure long term reusability of building materials. > To ensure waste avoidance, reuse and recycling during the design, construction and operation stages of development. > To minimise materials going to landfill during construction. > To eliminate materials going to landfill during operation.	> Encourage the use of materials that minimise ecological or health impacts and greenhouse gases, based Life Cycle Assessment. > Encourage the use of materials that can be expected to endure for the life of the development with minimal maintenance and can be recycled at the end of their useful life. > Encourage the reuse of recycled materials and the use of materials with recycled components. > Encourage the use of materials produced in Victoria or Australia. > Encourage the use of pre-fabricated, pre-cut and standardised components to reduce waste. > Maximise use of recycled timbers, eliminate use of timbers from non-sustainable resources (e.g. non-plantation native forest timber). > Incorporate adequate and accessible recycling facilities for building occupants and for collection. > Ensure provision for communal and/or individual household based composting facilities for all kitchen and garden bio-waste. > Consider requirements for Waste Management Plan (refer section 12. Application Requirements).
> To reduce the impact of stormwater run-off and improve the water quality of stormwater run-off.	> Encourage the use of pollutant traps to prevent garbage and other contamination entering waterways. > Ensure Construction Management Plans adequately address stormwater management and potential environmental impacts (refer Application Requirements in section 12).

Indoor Environment Quality (as part of a Healthy City)

Objectives	Guidelines
> To achieve a healthy indoor environment quality for the wellbeing of building occupants. > To reduce the impact of noise pollution.	> Ensure the provision of airflow, fresh air intake, cross-ventilation, daylight, appropriate levels of lighting, views and easy access to outdoor areas, including consideration of the following: - Windows and doors should be situated to achieve natural cross-ventilation. - Provide for the effective delivery and mixing of fresh air to support the health, safety and comfort of building occupants. - Ensure that all fresh air intakes are located away from loading areas, exhaust fans from underground parking areas, garbage waste storage areas and restaurants and other contamination points that may transfer odours, particulates and moisture to working/living/residential spaces. > Ensure internal design reduces reliance on mechanical heating, ventilation, cooling and lighting systems. > Provide for a high level of occupant control over thermal, ventilation and lighting systems to support optimum health, productivity and comfort conditions. > Ensure the exclusion of external pollutants (including odours) and the safe disposal of internally generated pollutants. > Ensure the use of materials with low levels of toxic chemicals, minimal off-gassing and production of allergens and other internal air pollutants. > Ensure design minimises noise levels and noise transfer within and between buildings and associated external areas, including: - Appropriate wall construction types to ensure that sound transmittance levels between rooms of buildings meet the appropriate levels for intended use. - Consider the location of uses and plant equipment, such as exhaust fans and waste collection areas, in relation to noise generation. - Ensure plant equipment is positioned and baffled to minimise any noise impact. - Encourage the use of appropriate acoustic treatment such as double-glazing windows and acoustic fencing to minimise any noise impact. - Provide an acoustic report in accordance with section 12. Application Requirements.

Sustainable Transport

Objectives	Guidelines
> To minimise car dependency. > To ensure that the built environment is designed to promote walking, cycling and the use of public transport. > To reduce greenhouse gas emissions associated with transport.	> Apply reduced car parking rates and allow for dwellings with no car parking allocation (refer section 8. Car Parking). > Encourage multi use of car parking spaces. > Encourage the implementation of car sharing schemes, both within individual developments and across the TCI precinct. > Consider provision for electric vehicles (e.g. docking stations). > Maximise the provision of bicycle parking (refer section 8.0 Bicycle Parking). > Ensure the provision of end of trip bicycle facilities. > Require Green Travel Plans to be submitted with development applications (see section 12. Application Requirements).

Integrated Ecology

Objectives	Guidelines
> To protect and enhance biodiversity within the municipality. > To provide sustainable landscapes. > To encourage the planting of indigenous vegetation. > To reduce the urban heat island effect.	> Use on-site landscaping to enhance and improve the micro-climate conditions of the development and precinct (e.g. reduction in the urban heat island effect). > Encourage the use of native plant species. > Landscaping should be used to maximise permeable surface area. > Incorporate water sensitive urban design techniques into landscaping (e.g. bioretention). > Allow for opportunities to grow fruit and vegetables in on-site communal and/or private open spaces. > Incorporate green roofs and/or walls. > Landscape design and species selection should consider opportunities to encourage habitat linkages to existing habitat areas/corridors.

7. Sustainable Transport - Bicycle Parking

7.1 Objectives

- > To increase bicycle ownership and use.
- > To reduce reliance on the car.
- > To provide secure, accessible and convenient bicycle parking spaces and associated shower and change facilities.
- > To reduce greenhouse gas emissions associated with transport.

7.2 Requirements

- > Bicycle parking should generally be provided at the following rates (based on the Moreland Bike Plan, but updated with regard to TCI objectives):

Table 6: Bicycle Parking Rates

Use	Number of bicycle
Dwelling/ Accommodation	1 space per bedroom and/or per studio dwelling
Office	1 employee space per 200m ² gross floor area, 1 visitor space per 750m ² over 1000m ²
Retail/Shop	1 employee space per 300m ² gross floor area, 1 visitor space per 500m ² over 1000m ²

Note 1. For other uses, refer to Moreland Bike Plan 2000

7.3 Implementation

- > Include ESD objectives, requirements and guidelines in the ACZ or LPPF of the Moreland Planning Scheme.

- > Bicycle access and design of bicycle parking facilities should be designed in accordance with the *TCI Built Form Guidelines* (refer section 4, Table 2).
- > End of trip bicycle facilities should be provided in accordance with the *TCI Built Form Guidelines* (refer section 4, Table 2).
- > A Green Travel Plan is required to be submitted to detail a range of site specific actions to encourage the use of more sustainable transport options (refer section 12 Application Requirements).

8. Sustainable Transport - Car Parking

8.1 Objectives

- > To reduce car ownership and use.
- > To facilitate flexible use of car parking spaces.
- > To manage car parking spaces in a centralised manner across the TCI area.

8.2 Requirements

- > Car parking is intended to be provided at a reduced rate of the planning scheme, as identified in the Public Realm and Infrastructure Strategy (see section on Access and Movement Projects, Vehicle Parking Strategy). These reduced rates require further definition and justification before specific reduced car parking rates per use can be identified (refer to section 13 The Next Stage).
- > Car parking should be designed in accordance with the TCI Built Form Guidelines (refer section 4, Table 2).
- > A Green Travel Plan is required to be submitted to detail a range of site specific actions to encourage the use of more sustainable transport options (refer section 12 Application Requirements).

8.3 Implementation

- > Undertake the necessary work to include a Parking Precinct Plan in the schedule to clause 52.06 of the Moreland Planning Scheme to vary the standard car parking rates for different uses (refer to section 13 The Next Stage).
- > Consider including car parking in a Development Contribution Plan Overlay (relevant if contributions are required to a centralised car parking scheme).
- > Consider establishment of relevant management structures (relevant if a centralised car parking scheme is implemented).

9. Advertising Signs

9.1 Objectives

- > To ensure that advertising signs are coordinated across the centre to reduce visual clutter and avoid loss of amenity.
- > To encourage well-designed signs that respect the scale, architecture and character of a building and the quality of the public realm.
- > To avoid visual pollution and intrusive light spill from advertising signs.
- > To recognise the role of advertising signage in promoting economic activity.
- > To encourage a coordinated approach to signage across the different occupants of a building.

9.2 Requirements

- > Planning applications for advertising signage must meet the above objectives and objectives for the public realm (refer Public Realm and Infrastructure Strategy).

9.3 Implementation

- > Objectives included in ACZ of the Moreland Planning Scheme, as required.

10. Subdivision and Site Consolidation

10.1 Objectives

- > Consolidation of land to facilitate the creation of viable development sites is encouraged.
- > Applications for subdivision of existing sites that are not associated with a development proposal that supports the objectives promoted by this Strategy are discouraged.

10.2 Requirements

- > The existing planning scheme provisions are adequate, no further requirements are needed.

10.3 Implementation

- > Objectives included in ACZ of the Moreland Planning Scheme.
- > Site consolidation should encourage affordable housing development, noting that both private and not-for-profit developers have preferred criteria re lot size, dwelling unit fit out, access to services etc.

11. Development Contributions

11.1 Objectives

- > Ensure new development contributes to the improvement of municipal infrastructure.
- > Ensure new development contributes to the TCI Streetscape Masterplan (included in the Public Realm and Infrastructure Strategy).
- > Ensure the timely and orderly provision of infrastructure to service the forecast future needs of the TCI area.

11.2 Requirements

- > Development contributions are intended to be required in accordance with a Development Contributions Plan (yet to be prepared, see section 13 The Next Stage).
- > General streetscape upgrades will be required to be undertaken in conjunction with construction works as appropriate, in accordance with the TCI Streetscape Masterplan (included in the Public Realm and Infrastructure Strategy).

11.3 Implementation

- > Undertake the necessary work to consider inclusion of a Development Contributions Plan Overlay in the Moreland Planning Scheme (refer section 13 The Next Stage).
- > Use permit conditions to require general streetscape works as appropriate, in accordance with TCI Streetscape Masterplan (included in the Public Realm and Infrastructure Strategy).

12. Application Requirements

Planning applications must be accompanied by:

- > Completed application form
- > Copy of current title
- > Urban context report
- > Design response
- > Three sets of A1 size plans that include natural ground level and all levels to the Australian Height Datum
- > One set of A3 size plans
- > Any other requirements established through the pre-application process (see below).

At the discretion of the Responsible Authority, a range of other supporting reports may also be required, as listed below. This will generally be dependent on the size and significance of the proposal.

- > ESD Management Plan (where appropriate, ESD features must be clearly shown in all associated plans and architectural drawings)
- > Demolition and Construction Management Plan
- > Green Travel Plan
- > Traffic Report and Management Plan
- > Landscape Plan
- > Accessibility Report (where appropriate, accessibility features must be clearly shown in all associated plans and architectural drawings)
- > Housing Affordability Report
- > Waste Management and Disposal Plan
- > Wind Impact Assessment
- > Acoustic Report (generally for sites adjoining Bell Street, Sydney Road and the railway)

12.1 Urban Context Report

A comprehensive urban context analysis will form the basis for consideration of height, scale and massing of new development and demonstrate how the development will take into account the physical, cultural and strategic context of its location.

The urban context report may use a site plan, photographs and/or other techniques to accurately show the following in relation to the site and its neighbourhood:

Site

- > Site shape, size, orientation and easements.
- > Levels of the site and the difference in levels between the site and surrounding properties.
- > Location of existing buildings on the site and on surrounding properties, including the location and height of walls built to the site boundary.
- > Previous uses of existing buildings and site, where known.
- > Use of surrounding buildings.
- > Location of secluded private open space and habitable room windows of surrounding properties that are located within 9 metres of the site.
- > Solar access to the site and to surrounding properties.
- > Location of existing significant trees on the site and any significant trees removed from the site in the 12 months prior to the application being made, where known.

- > Contaminated soils and filled areas, where known.
- > Views to and from the site, such as landmarks and vistas.
- > Street frontage features such as poles, street trees, kerb crossovers and pedestrian spaces.
- > Heritage and other notable features or characteristics of the site.

Neighbourhood

- > The existing built form, scale and character of the surrounding neighbourhood including front fencing and architectural and roof styles.
- > Any other notable features or characteristics of the neighbourhood.
- > The proposed land use and built form character of the neighbourhood, as defined by the objectives of this Strategy.

12.2 Design Response

The design response must explain how the proposed development:

- > Derives from and responds to the urban context report
- > Responds to the objectives, requirements and design guidelines of this strategy
- > Responds to any other relevant TCI objectives and strategies
- > Responds to any other relevant planning provisions that apply to the land
- > Responds to any accompanying technical report that has been required at pre-application stage (see above for complete list)

The design response must include:

- > Full shadow diagrams and assessment
- > Elevations showing techniques to control overlooking
- > A detailed written assessment, describing how the design response addresses the objectives, requirements and guidelines of this Strategy and the recommendations of relevant technical reports.

12.3 ESD Management Plan

The ESD Management Plan is required to detail the proposed sustainable design initiatives, across all stages of development. The Plan must address, but is not limited to, the following:

- > How the development seeks to address each of the objectives and requirements listed above, over the whole life of the development.
- > Document an assessment of the development's ESD performance using the relevant assessment tool listed in the ESD section above (or alternative assessment tool, as agreed by the Responsible Authority). The assessment is required to confirm the achievement of the relevant nominated performance listed in section 7 (or alternative, as agreed by the RA).
- > Identify responsibilities and a schedule for implementation and ongoing management, maintenance and monitoring.
- > Demonstrate that the design elements, technologies and operational practices that comprise the ESD Management Plan can be maintained over time.
- > Demonstrate how the ESD design elements, technologies and operational practices have been incorporated into the overall design of the building. Where appropriate, ESD features must be clearly shown in all associated plans and architectural drawings.
- > Green Star Design Certification and Green Star As Built Certification is required. Alternatively, if Green Star certification is not used, documentation must be submitted to Council to demonstrate the equivalent performance standard has been achieved, as identified in section 6. (cont.)

Information must be supplied at the following stages:

- Lodgement of planning permit application
- Prior to commencement of construction
- Post occupancy (within 24 months)

12.4 Demolition and Construction Management Plan

The Demolition and Construction Management Plan is required to minimise environmental impacts associated with site demolition and construction practices. The Plan must address, but is not limited to, the following:

- > Management of the construction site to minimise pollution of stormwater. No sediment laden run-off is to leave the site.
- > Materials with the potential to leach or erode contaminants must be kept dry during construction.
- > Maximise the amount of materials to be reused on the site.
- > Identify recyclable materials to be discarded from existing structures (if applicable).
- > Demonstrate best practice standards for the control of dust.
- > Avoid use of construction materials with toxic components to facilitate recycling and reduce pollution.
- > Minimise site disturbance including protection of existing vegetation to be retained and topsoil to be protected, where appropriate.
- > Ensure that footpaths surrounding the site are kept clear and safe to provide continued access and availability to pedestrians throughout the demolition/construction period.
- > Measures to minimise spread of mud, dirt and debris onto adjoining footpaths and streets by trucks leaving the site (e.g. on-site truck cleaning).
- > All on-site contractors and sub-contractors must be trained and/or informed of the Demolition and Construction Management Plan.
- > Minimise unreasonable noise levels off-site, with no unreasonable noise levels outside of working hours, including the specification of:
 - Proposed hours of demolition/construction.
 - Measures to minimise and control noise from demolition/construction works.
 - Measures to minimise impacts of demolition/construction vehicles arriving and departing from the site.
 - Details of the operation of cranes on-site and their accommodation.
 - Measures to accommodate the private vehicles of workers/tradespersons.
 - Measures to minimise the creation of conditions liable to be a nuisance.
 - Measures to minimise impact on local amenity of operations such as waste collection, vehicle loading and unloading, management of car parking areas, etc.

12.5 Green Travel Plan

The Green Travel Plan is required to detail the range of site specific actions to be included in the development and/or implemented post occupancy, to encourage the use of more sustainable transport options. The Plan must address, but is not limited to, the following:

- > Programs and actions to encourage behaviour change for future building occupants. Consideration should be given to, but is not limited to, the following:
 - Walking
 - Cycling
 - Public transport
 - Incentives and promotion
 - Flexible ways of working (such as working from home or teleworking)
 - Car pooling
 - Car share schemes
 - Company car fleet options
- > Identify targets and responsibilities, and a schedule for implementation and ongoing management, maintenance.

12.6 Traffic and Parking Report and Management Plan

The Traffic and Parking Report must detail an assessment of the development's car parking and traffic movement generation rates and the ability of the street network to accommodate traffic movements.

The Traffic and Parking Management Plan must include recommendations to address the TCI Sustainable Transport objectives (refer sections 7 and 8 and the TCI Public Realm and Infrastructure Strategy) and to accommodate the recommendations of the Green Travel Plan (refer section 12.5 above).

The Report and Management Plan must address, but is not limited to:

- > The car parking design guidelines included in Table 2 TCI Built Form Guidelines;
- > Numbers of car spaces to be provided (including disabled spaces) and the location of car parking areas, ingress and egress;
- > The number and location of resident, employee and visitor parking, including opportunities for multi use of car parking spaces;
- > Details of signage, line marking and management of restricted and unrestricted parking areas;
- > Loading areas and access for waste collection and service vehicles, including adequate accommodation for furniture removal trucks associated with people moving in and out of apartments;
- > The location and management of any vehicle and access controls, card reading, intercom and/or other security devices required to operate car park gates; and
- > Management and timing of any required roadworks.

12.7 Landscape Plan

The landscape plan must address the landscape guidelines included in Table 2 TCI Built Form Guidelines and the integrated ecology guidelines included in Table 5 TCI ESD Guidelines, and include the following:

- > A schedule of all proposed trees, shrubs and ground covers (including numbers, size at planting, size at maturity and botanical names), as well as sealed and paved surfaces. The flora selection and landscape design should be drought tolerant and based on species selection recommended in the Moreland City Council landscape Guidelines and Technical Notes.
- > Identification of any existing tree(s) and vegetation proposed to be removed and retained. Vegetation retainment must include strategies for the retainment (i.e. barriers and signage during the construction process).
- > The provision of canopy trees within the front setback(s) to assist in the integration of the development within the existing streetscape, where consistent with the TCI Streetscape Masterplan (refer Economic Development Strategy).
- > Details of the location and type of all paved and sealed areas. Extensive hard surfaces are not supported. The adoption of porous/permeable paving is encouraged.
- > Integration of water sensitive urban design (WSUD) features (eg. raingardens, bio-swales etc) if contained within Environmental Management Plan.

12.8 Accessibility Report

An Accessibility Report must:

- > Demonstrate incorporation of the essential features of the Adaptable Housing Standard 4299 (Adaptable Housing Class C), for the required proportion of dwellings (refer section 4. Built Form).
- > How the development meets the objectives of the Disability Discrimination Act and the requirements of the Disability (Access to Premises – Buildings) Standard 2010.

The Report must also include, but is not limited to the following:

- > Vehicular and pedestrian access into the buildings;
- > Access to the lifts;
- > The provision of tactile indicators;
- > The provision of Braille indicators for the lifts;
- > The use of contrasting paving or surface materials to assist the vision impaired;
- > Emergency exits, particularly above the ground floor; and
- > Car parking.

Where appropriate, accessibility features must be clearly shown in all associated plans and architectural drawings.

12.9 Housing Affordability Report

The Housing Affordability Report must detail the measures included in the development to respond to the TCI housing affordability objectives and requirements.

The Report must provide details on the intended partnership arrangement with a Housing Association or alternative measures to meet the affordable housing requirement identified in section 3. Land Use.

To address the 20 per cent affordable housing target, planning permit applicants should demonstrate how their proposal will provide affordable and appropriate housing to meet anticipated future stock shortages.

12.10 Waste Management and Disposal Plan

The Waste Management and Disposal Plan should address how rubbish will be disposed of, and how it will be stored prior to disposal. The Waste Management and Disposal Plan must clearly respond to the waste minimisation and recycling requirements of the ESD objectives and guidelines (refer section 6 and Table 5, Sustainable Resource Use). Large developments will generate cardboard waste as people move in and this should be addressed.

In general, waste plans should address the storage and disposal of: household waste; bottles; paper and cardboard, green waste.

When providing for waste disposal, consider the following:

- > vertical refuse chutes at each floor level and within a convenient distance of all residential units;
- > refuse room and sufficient space for the required number and size of bins with ease of access to an external collection area;
- > refuse room or bin storage may require compacting equipment with an appropriate space allocation for its operation;
- > waste separation requirements (i.e. separate chutes and bins for general waste, recyclables, compost material, waste storage/separation space sufficient for at least one day's waste generation).

The Plan must include, but is not limited to the following:

- > Calculations showing that all occupiers will be sufficiently catered for with the proposed number of garbage and recycling bins.

- > The size and location for the storage of all waste and recyclables, including: green waste; food waste; and high volume, low toxicity waste (e.g. paint, batteries, e-waste) on the ground/basement floor and details of screening from view.
- > A plan showing that the storage area is sufficient to cater for the number of bins, which must include the option of the Body Corporate opting for Council collection.
- > The size and location for the storage of recyclables on each floor.
- > Details of ventilation if garbage bins are in enclosed areas;
- > The provision of triple bins provided in cupboards in each unit to allow for separation of food and recyclables from other garbage.
- > Design details of the built-in waste/recycling system for the building indicating the provision made for the separate disposal of all waste streams.
- > A description of ease of disposal for residents that does not disadvantage recycling (e.g. chutes work for garbage but not for recycling, because of smashed glass, requiring additional effort to recycle, discouraging recycling).
- > The consideration of the ease of taking the fully laden bins to the collection point(s).
- > Private contractor options, if applicable, detailing the methods of collection with regard to site and road network constraints and the potential requirement to manoeuvre garbage trucks, including a collection plan approved by the proposed collection agencies that meets Council's Waste Management Plan.
- > Confirmation of the hours and frequency of pick-up for general and recyclable waste, with regard to potential noise impacts to the surrounding neighbourhood.

12.11 Wind Impact Assessment

A Wind Impact Assessment should provide an assessment of the building's contribution to adverse wind effects and recommend measures for attenuation, including:

- > Use of stepped building forms and articulation of the building mass to reduce wind turbulence at ground level.
- > Provision of protection for pedestrians in public and private spaces from wind down drafts and wind tunnel effects.

12.12 Acoustic Report

To be prepared by a qualified Acoustic Engineer. The Acoustic Report must include an assessment of all likely external noise sources that may impact on the development and recommend appropriate noise attenuation measures to address noise. Construction and maintenance of the building must be in accordance with the recommendations contained in this report to the satisfaction of the Responsible Authority.

13. The Next Stage - Planning Scheme Amendment

The Land Use and Built Form Strategy will be implemented by an amendment to the Moreland Planning Scheme. The amendment should consist of the following:

1. Changes to the **Local Planning Policy Framework** (LPPF, Clauses 21 and 22) to update the relevant overarching policy objectives for Coburg as a Principal Activity Centre. This is likely to include removal of the current interim Coburg Activity Centre Local Policy (Clause 22.12).
2. Introduction of the new **Activity Centre Zone** and Schedule (ACZ, Clause 37.08) to include the specific land use and built form objectives, requirements and guidelines for the TCI area. At the time of writing the Department of Planning and Community Development (DPCD) had indicated an intention to introduce the ACZ for the Coburg Activity Centre by the end of 2010, based on the Central Coburg 2020 Structure Plan. If this eventuates, the TCI amendment would update the ACZ for the TCI area.
3. Introduction of a **Parking Precinct Plan** (Clause 52.06). A Parking Precinct Plan (PPP) enables variation of the standard car parking rates of the planning scheme in a consistent and managed manner across the TCI area. A PPP enables implementation of the sustainable transport objectives for TCI (as identified in TCI Vision and Delivery Brief Principles and in the Public Realm and Infrastructure Strategy).

In order to introduce a PPP, specific car parking rates must be defined based on a comprehensive Parking Strategy for the area. The Parking Strategy must assess existing parking supply and demand and forecast future demand, based on the TCI forecast development yields. It must then identify the measures to be applied to achieve the sustainable transport objectives for the

centre (the PPP is one of the measures). It should be accompanied by a monitoring program to regularly monitor and review the PPP to ensure it continues to reflect the parking needs of the precinct.

4. Introduction of a **Development Contribution Plan** (DCP). A DCP enables contributions to be levied towards the funding of infrastructure items. To implement a DCP as part of the TCI amendment, the first step is to determine what items development contributions will be levied for (e.g. new streets and paths, streetscape works, open space improvements, drainage infrastructure, community facilities, public art, car parking, energy infrastructure) and then prepare detailed costings for each item; timing to delivery; identify user catchments; and apportion costs per development within the catchment.
5. Introduction of the **Public Acquisition Overlay** (PAO) on land intended to be purchased to create new streets and pedestrian links. This should be determined as part of the overall Transport and Movement Network and Land Acquisition Strategy (refer to Economic Development Strategy).

13.1 Amendment Process

The amendment process is defined by the *Planning and Environment Act 1987*. The standard amendment process includes the following key steps and generally takes approximately twelve to eighteen months. The timeframe is largely dependent on Council reporting timeframes, DPCD response times and the number and nature of submissions.

1. Council resolution to request Minister's authorisation to prepare amendment and, following authorisation, to place amendment on public exhibition.
2. Minister's authorisation.
3. Public exhibition (minimum statutory timeframe of 4 weeks).
4. Consideration of submissions.
5. Council resolution to request Minister to appoint Panel to consider amendment and submissions.
6. Minister appoints Panel.
7. Panel process, including Directions Hearing and Panel Hearing.
8. Panel Report and Recommendations.
9. Council resolution to approve amendment (with or without changes) and to submit to Minister for approval.
10. Minister approves amendment and amendment gazetted.

14. Proposals not consistent with the Strategy

14.1 Proposals Not Consistent with Land Use

Proposals that are not consistent with the land use objectives and requirements of this Strategy must provide justification. The justification must include:

- > A market feasibility analysis to demonstrate why the land use objectives and requirements cannot be met.
- > An assessment of the impact of the proposal on the ability to achieve the overall land use objectives, benchmarks and development yields for the centre (as detailed in the Economic Development Strategy). This assessment must have regard to any prior development approvals within the TCI area that are also inconsistent with the land use objectives and requirements.

14.2 Proposals Not Consistent with Built Form

Proposals that are not consistent with the building height and setback requirements of this strategy must justify why.

Proposals that are greater than the building height and setback requirements must demonstrate:

- > how the proposal addresses the overshadowing standards for the public realm (refer to section 4 Built Form);
- > how the proposal addresses the objectives for interface with the public realm (refer to section 4 Built Form);
- > how the proposal impacts on the overall built form and urban design pattern (including legibility) to be established for the centre (refer Attachment 1);
- > how the proposal accommodates the associated increases in car and bicycle parking and vehicle movements; and
- > additional public benefits to be delivered by the proposal, that extend beyond the objectives of this strategy and beyond current best practice.

Proposals that are lesser than the building height and setback requirements (i.e. 2 or more storeys less) must provide a market feasibility analysis to demonstrate why the required heights and setbacks cannot be met, and must demonstrate:

- > how the proposal impacts on the overall vision and urban consolidation objectives for the centre;

- > how the proposal impacts on the overall built form and urban design pattern (including legibility) to be established for the centre (refer Attachment 1);
- > proposed measures to facilitate future intensification of the development or site (e.g. construction methods to ensure additional storeys can be added in future); and
- > an assessment of the impact of the proposal's ability to achieve the overall land use objectives, benchmarks and development yields for the centre (as detailed in the Economic Development Strategy). This assessment must have regard to any prior development approvals within the TCI area that are also inconsistent with the land use objectives and requirements.

Attachment 1.

Building Heights and Setbacks Justification

Preferred Development Density

Three concept design scenarios were prepared as part of The Coburg Initiative (TCI) master planning process. These concept plans are based on various density scenarios and are labelled Concept Design Low, Concept Design Medium and Concept Design High. The three concept design scenarios along with the Central Coburg 2020 Structure Plan were evaluated to choose a preferred development density for Central Coburg. The main factors in the decision making process were the amount of development needed in Central Coburg for it to function efficiently as a Principal Activity Centre and the resource consumption of the various development scenarios. A summary of this evaluation is outlined below.

Economic Development Strategy

The Economic Development Strategy has been prepared in order to identify and test whether the economic imperatives sought for the project could be delivered by the Central Coburg Structure Plan 2020.

A key question from the outset for the project was whether the Central Coburg Structure Plan 2020 could deliver a centre that would fulfil its role as a Principal Activity Centre - a role which is strongly aligned the Structure Plan's vision that it be the primary place of employment, shopping, living and activity in Moreland.

To achieve a Principal Activity Centre offer Central Coburg has to provide 4 key things:

- > A mix of activities that generate high numbers of trips, including business, retail, services and entertainment;
- > Be generally well served by multiple public transport routes and on the Principal Public Transport Network or capable of being linked to that network;

- > A very large catchment covering several suburbs, and attracting activities that meet regional needs; and
- > The potential to grow and support intensive housing developments without conflicting with surrounding land uses.

The Economic Development Strategy clearly identifies that because the centre poorly performs in the first element, it is unable to achieve element three. Consequently the housing, retail, commercial and service targets established under the Central Coburg Structure Plan fall significantly short from those that are necessary for the centre to become a Principal Activity Centre or perform meaningfully within the Moreland economy.

Through analysing and benchmarking Central Coburg against two highly successful Principal Activity Centres – Box Hill and Subiaco, it has been possible to identify both the quantum of change (total jobs and investment required) and the diversity of uses that could be appropriately located in Central Coburg to achieve the expectations of a Principal Activity Centre. This has resulted in a need for taller buildings than that identified by the Structure Plan to ensure the TCI area can accommodate the development densities required to adequately provide for the quantum of change and diversity of uses identified as necessary for a Principal Activity Centre. For more information please refer to the Economic Development Strategy.

Integrated Resource Management (IRM) Model

IRM is a tool that provides performance indicators linking design objectives to sustainability objectives in a common data model. This in turn integrates resource flow parameters with different technical disciplines. It can be applied to the design and development of a plan whether for a region, city or locality to rapidly test different development scenarios and options. IRM uses performance outputs

to inform the design process in order to optimise and mitigate the design (design continuous improvement through an iterative process of define, evaluate, refine and optimise).

Within the TCI Public Realm and Infrastructure Strategy the IRM tool has been used to assist in the decision making process. Aligning the systems of water, energy, waste, transport and carbon, the TCI team has the ability to explore the resource implications of a number of land use scenarios and the impact of various infrastructure projects on the supply and demand outputs of each resource at a high level.

The TCI IRM tool is an interactive program and is not a static source of information. Assumptions made in the investigation of the Public Realm and Infrastructure Strategy have been made to provide an insight into the characteristics of the potential development of the TCI area. The key findings include:

- > Concept Plan 3 (High) is the most efficient resource consumer and generator of the three options evaluated and is approximately 20-30% more efficient than the Structure Plan.
- > Without the introduction of any of the proposed infrastructure projects (business as usual) the total resources consumed and generated increase by approximately 40-60%.
- > Introducing a number of the infrastructure projects to the Concept Plan 3 (High) scenario reduced the total consumption and generation of water and electricity to a lower quantity than that projected under the Structure Plan Scenario

For further information and detail on IRM model outputs please refer Appendix 2 of the Public Realm and Infrastructure Strategy.

Based on the output of the IRM model and the requirements of the Economic Development Strategy, Concept Design High was selected as the preferred development scenario for Central Coburg.

Built Form Principles

The building heights and setbacks have been developed on the basis of the following built form principles:

Locate highest density mixed use development in the core where:

- > large development parcels are located;
- > there is minimal site interface issues;
- > council is a major land holder;
- > land is close to all public transport options.

The development envelopes have been defined in order to :

- > rationalise development parcels;
- > manage overshadowing of public open space;
- > achieve a rational building footprint (eg: to achieve good quality apartment layout, offices, supermarkets and retail at street);
- > to ensure viable movement network and car parking configuration;
- > maximise solar access and orientation;
- > to create appropriate separation between buildings;
- > define street enclosure and character; and
- > locate activities in preferred locations and maximise passive surveillance of streets and public spaces.

Building Heights and Setbacks

The building heights for the TCI are indicated in Figure 3 of the Land Use and Built Form Strategy. The building height in the Mixed Use Core is generally 10 storeys with 6–8 storeys height limit for properties adjacent to the core. A 2-4 storey building height applies to the edge of the TCI boundary which has an interface with existing residential area.

The building heights have been established to accommodate the development yields necessary to provide for the quantum of change and diversity of uses identified by the TCI project to realise the Principal Activity Centre status of Coburg.

The TCI heights are generally about 4 storeys greater (at the highest points) than what was originally identified by the Structure Plan in the Mixed Use Core area. The heights on the edge of the TCI precinct are generally consistent with the Structure Plan. The original Structure Plan building heights were based on the residential, retail and office demands identified in the Central Coburg Development Options Appraisal, SGS Economics, 2005 and the capacity within Central Coburg to accommodate these uses.

The Structure Plan also identified locations for taller buildings on gateway sites. This approach has not been brought forward by the TCI given that buildings are significantly taller overall.

Setbacks

The building setbacks are designed to minimise impact on public spaces. A set of overshadowing criteria have been developed for the key public open spaces within the TCI area which are as follows:

- > Category 1 (Civic Square Market Site) - No more than 1/2 the space to be in shadow at any time between 10.30am and 2.30pm (4hrs) on 21 June (Winter Solstice).

- > Category 1A (Bridges Reserve) – No more than 1/3 of the space to be in shadow at any time between 10.30am and 2.30pm (4hrs) on 21 June (Winter Solstice).
- > Category 2 (Vic Mall) - No overshadowing of the southern footpath (within 3m from the property boundary) between 11.00am and 2pm (3hrs) on 21 June (Winter Solstice).
- > Category 3 (Civic Square Russell Street Site, Civic Square Bob Hawke Centre Site, Station Square) - No more than 1/3 of the space to be in shadow between 10.30am and 2.30pm (4hrs) on 21 March / September (Equinox).

These criteria have been designed to maximise solar access to key public spaces, even with an increased development density. The overshadowing diagrams below show how the overshadowing criteria are achieved by the heights and setbacks defined for the TCI area.

The TCI boundary has residential interface mainly along Hudson Street, Rodda Street, Ross Street and along residential properties located north of Bell Street. The interface with these adjacent low scale residential areas has been resolved by nominating 2-4 storey building heights. For the properties north of Bell Street the 10 storey buildings will have adequate setback in the form of a 2-4 storey buildings. The taller 10 storey buildings located north of Bell Street will not have any overshadowing on the existing residential areas. The pocket of residential area north of Bell Street is likely to change in character with time. The cross sections showing the interface can be seen in Figure 4, 5 and 6.

The impact of the increased development density on overall transport and movement network is still being assessed by ARUP.



CIVIC SQUARE MARKET SITE

Category - 1

No more than 1/2 of the space to be in shadow at any time between **10:30 am and 2:30 pm (4 hours)** on **Winter Solstice (21 June)**



VICTORIA STREET MALL

Category - 2

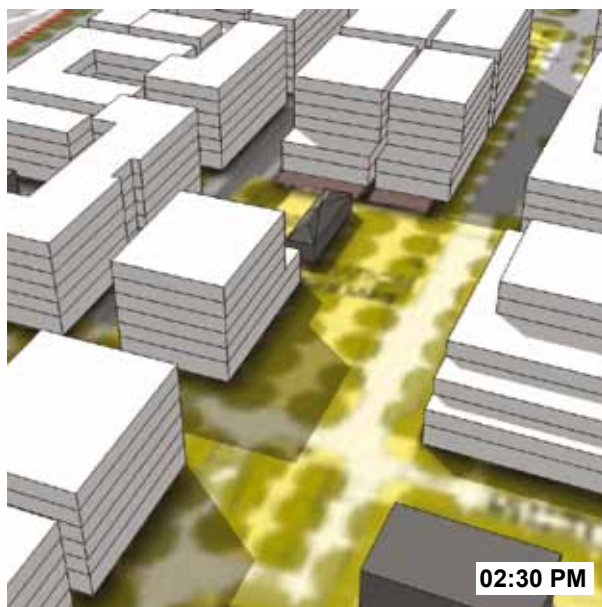
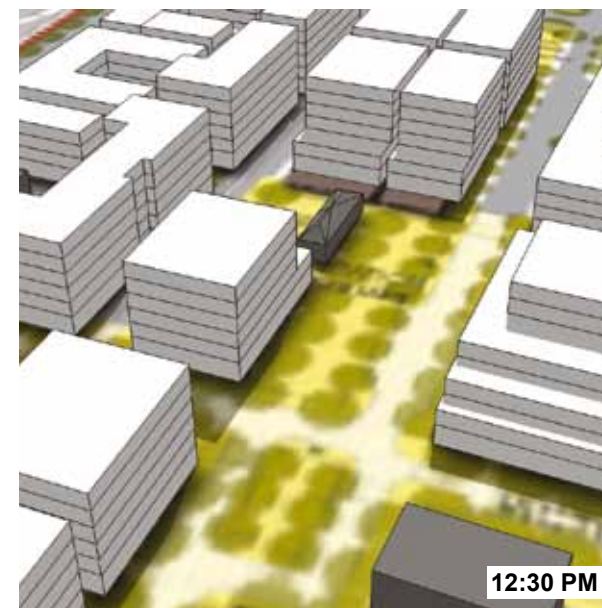
No overshadowing of the southern footpath (3m from property boundary) between **11:00 am and 2:00 pm (3 hours)** on **Winter Solstice (21 June)**



CIVIC SQUARE RUSSELL SITE

Category - 3

No more than 1/3 of the space to be in shadow at any time between **10:30 am** and **2:30 pm (4 hours)** on **Equinox (21 Mar/Sep)**



COBURG STATION FORECOURT

Category - 3

No more than 1/3 of the space to be in shadow at any time between **10:30 am and 2:30 pm (4 hours)** on **Equinox (21 Mar/Sep)**



CIVIC SQUARE BOB HAWKE CENTRE SITE

Category - 3

No more than 1/3 of the space to be in shadow
at any time between **10:30 am and 2:30 pm (4
hours)** on **Equinox (21 Mar/Sep)**



BRIDGES RESERVE

Category - 1

No more than 1/3 of the space to be in shadow at any time between **10:30 am and 2:30 pm (4 hours)** on **Winter Solstice (21 Jun)**



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