INTRODUCTION

Purpose of the plan
The MPAC to 2040 – Moonee Ponds Activity Centre Local Plan (Local Plan) considers both the expected future growth of the Moonee Ponds Activity Centre (MPAC), and the economic role MPAC plays in Moonee Valley, in order to establish a clear vision and suite of land use and development controls to realise the vision. A tailored urban design response for MPAC will ensure the expected future growth takes place in a manner that successfully balances the valued attributes of MPAC and delivers a high quality living and working environment.

The Local Plan has been developed in line with the MV2040 Strategy (MV2040), the long term strategy to achieve a healthy city that is fair, thriving, connected, green and beautiful.

The future MPAC aims to deliver on these themes by ensuring it is a centre where it is easy to move around, the environment is resilient, the place is full of life, and the value heritage character of the area is protected.

The Local Plan includes recommendations for how new development should function, how community facilities should be delivered, how pedestrian, cyclist and vehicle access and movement can be improved, what public spaces should look like (including how to make them more environmentally sustainable), and how we can facilitate the delivery of affordable housing outcomes.

Vision
The MV2040 vision for Moonee Ponds is that by 2040, the activity centre will:

- be the premier business, civic, cultural, creative, community and entertainment destination of Moonee Valley
- be an attractive, cosmopolitan city centre that fosters creativity and imagination, which includes attractive and functional public spaces for events and activities
- be a well-connected centre with a safe and accessible public transport interchange and an excellent network of walking and cycling connection within and to other neighbourhoods
- have maximised the variety of resilient and vibrant green spaces
- have encouraged a diverse range of housing choices and affordable housing options
- have encouraged high quality architecture and design in all development
- have celebrated and protected the valued heritage qualities of MPAC.

Background documents
The Local Plan for MPAC is supported by a series of background documents, as outlined on page 4. Together they will replace the existing Moonee Ponds Activity Centre Structure Plan (updated 2012).
Moonee Ponds Activity Centre: Built Form (2019)

Integrated assessment of built form issues and the preferred outcomes to support the overall growth of the activity centre.

Moonee Ponds Activity Centre: Streetscapes and Public Spaces (2019)

Carefully considers the transport recommendations and presents the design and concept plans for key streets, ensuring a consistent design language and materiality for the activity centre.

Moonee Ponds Activity Centre: Transport (2019)

Integrated assessment of transport and car parking in the activity centre, and the preferred outcomes to support sustainable transport modes.

Moonee Ponds Activity Centre: Wind (2019)

Provides guidance for ensuring new development is designed to maximise pedestrian safety and comfort.

Moonee Ponds Activity Centre: Affordable Housing (2019)

Provides the strategic rationale to incentivise the delivery of affordable housing outcomes.

Moonee Ponds Activity Centre: Employment and Floor Space (2019)

Analysis of employment and floor space forecasts.

Moonee Ponds Activity Centre: Public Open Space (2019)

Provides the strategic rationale and design principles for new public open spaces in the activity centre.
Key directions in the Local Plan are also informed by:

- MV2040 Strategy (2018)
MOONEE PONDS Activity Centre

MPAC is situated on the Craigieburn Railway Line and is approximately 6.5km north-west of the Melbourne Central Business District (CBD). It is the primary activity centre in Moonee Valley and plays an important role as a regional centre in Melbourne’s north-west.

MPAC’s proximity to Melbourne’s CBD and a variety of public transport options means it is appropriately placed to support medium to higher-density development. It is important to ensure new development respects MPAC’s rich history, including the heritage precinct of Puckle Street and the intricate network of laneways and low rise residential developments in the surrounding area.

Planning Controls

The Activity Centre Zone (ACZ) applying to MPAC Precincts 1-8 was introduced to the Moonee Valley Planning Scheme via Amendment C100 in March 2015, and gave effect to the Moonee Ponds Activity Centre Structure Plan 2010 (updated 2012). On this date, Amendment C156 also applied the ACZ to the Moonee Valley racecourse (Precinct 9) through a Ministerial Amendment. The racecourse site was previously subject to significant strategic planning via the Moonee Valley Racecourse Redevelopment Advisory Committee, established by the Minister for Planning in November 2012 to hear all relevant matters associated with the proposed redevelopment of the racecourse.

Figure 2: MPAC study area and precincts
CONTEXT

Growth
This information has been sourced from the MP2040 Strategy and the MPAC Employment and Floor Space document.

The Moonee Ponds neighbourhood is expected to undergo significant growth by 2040. A large proportion of this growth will be accommodated in MPAC.

People
In 2018 there were 3,579 people living in MPAC. This is expected to increase to between 10,800 and 11,600 by 2040 - more than tripling the 2018 population.

Dwellings
In 2018 there were 1,682 dwellings in MPAC. This is expected to increase to between 5,440 and 5,800 dwellings by 2040 - an almost three fold increase. The majority of new housing in MPAC is expected to be in the form of higher-density apartments.

In addition, the Moonee Valley Racecourse Master Plan indicates the redevelopment of the racecourse will deliver around 2,000 dwellings, reducing the pressure for new residential development within the core of MPAC.

Employment
In 2016, there were 7,037 jobs in MPAC. This is expected to increase to 13,837 by 2040 - an increase of almost double. Over 4,000 of these new jobs are forecast to be in the commercial sector, representing almost 60 per cent of total employment in MPAC.

MPAC is expected to accommodate more than 20 per cent of job growth within the municipality between 2016 and 2040.

Table 1: Employment forecasts 2016-2040

<table>
<thead>
<tr>
<th>Year</th>
<th>Retail</th>
<th></th>
<th>Commercial</th>
<th></th>
<th></th>
<th>Industrial</th>
<th></th>
<th></th>
<th>Institutional</th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
</tr>
<tr>
<td>2016</td>
<td>1,654</td>
<td>24%</td>
<td>4,151</td>
<td>59%</td>
<td>459</td>
<td>5%</td>
<td>908</td>
<td>13%</td>
<td>7,037</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2040</td>
<td>3,047</td>
<td>22%</td>
<td>8,257</td>
<td>60%</td>
<td>442</td>
<td>3%</td>
<td>2,091</td>
<td>15%</td>
<td>13,837</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Employment and Floor Space

There is expected to be demand for over 160,000 square metres of new employment floor space between 2016 and 2040. More than half of this additional floor space is expected to be commercial employment floor space. There is also expected to be demand for almost 35,000 square metres of retail floor space and more than 20,000 square metres of institutional floor space.

Table 2: Employment floor space

<table>
<thead>
<tr>
<th>Year</th>
<th>Retail</th>
<th>Commercial</th>
<th>Industrial</th>
<th>Institutional</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>41,347</td>
<td>96,971</td>
<td>21,056</td>
<td>10,523</td>
<td>169,898</td>
</tr>
<tr>
<td>2040</td>
<td>76,188</td>
<td>194,424</td>
<td>28,708</td>
<td>31,341</td>
<td>330,661</td>
</tr>
<tr>
<td>Change (demand for new floor space)</td>
<td>34,841</td>
<td>97,453</td>
<td>7,652</td>
<td>20,818</td>
<td>160,763</td>
</tr>
</tbody>
</table>


Policy

Plan Melbourne 2017-2050

Plan Melbourne identifies a network of activity centres of varying levels, with Moonee Ponds being identified as a Major Activity Centre. As a Major Activity Centre, MPAC is to serve as a focal point for services, employment, housing, public transport and social interaction. Major activity centres are expected to accommodate medium and higher density housing to support population and household growth forecasts.

MV2040 Strategy

MV2040 is Council’s long term plan for improving the health, vibrancy and resilience of Moonee Valley over the next two decades. It is focused on changing the way Council delivers for the community by adopting a neighbourhood planning approach. MV2040 identifies 13 20-minute neighbourhoods across the city, with Moonee Ponds being one of them.
LAND USE

Delivering the MV2040 themes of Fair (Qeente Boordup), Thriving (Bandingith), Connected (Yanoninon Maggoolee), Green (Wunwarren) and Beautiful (Nga-Ango Gunga)

The objectives and key directions have been sourced from the MV2040 Strategy and MPAC Built Form document.

OBJECTIVES

- Develop Moonee Ponds Activity Centre (MPAC) as the premier business, civic, cultural, creative, community and entertainment destination of the municipality.
- Develop MPAC as an attractive centre that fosters creativity, includes attractive and functional public spaces, has a safe and accessible public transport interchange and an excellent network of cycling and walking connections.
- Encourage a diverse range of housing choices and affordable housing options, including social housing.
- Facilitate mixed use developments that include a range of non-residential uses on identified large sites.

KEY DIRECTIONS

- Recent development trends in MPAC have favoured residential development over all other uses. However, as the primary activity centre in Moonee Valley, MPAC should be supported by:
  - facilitating a mixed-use centre with a mix of non-residential uses (where the amenity and heritage character of adjoining residential areas are protected)
  - encouraging the centre as a significant employment hub and facilitating complementary employment generating uses
  - reinforcing Puckle Street as the ‘retail core’ of the centre and ensure it retains its main street feel and function
  - encouraging the night time economy.
BUILT FORM

Delivering the MV2040 themes of Fair (Geente Boordup), Thriving (Bandingith), Connected (Yanoninon Magclee), Green (Wunwarren) and Beautiful (Nga-Ango Gunga)

The objective and key directions have been sourced from the MV2040 Strategy and MPAC BUILT Form document.

OBJECTIVE

- Facilitate the delivery of high-quality built form outcomes of every site.

KEY DIRECTIONS

- Encourage a diverse range of housing choices and affordable housing options.
- Facilitate mixed use developments that include a range of non-residential uses on identified large sites.
- Ensure development achieves a compact urban form that consolidates land use so as not to underutilise land for its intended purpose and proposed scale.
- Deliver a mixed-use centre with a range of built form typologies including low, medium and high-rise development.
- Locate hybrid developments with a range of building typologies and scales on the one site in Precincts 2 and 3.
- Deliver built form outcomes on identified large sites including the provision of public open space, affordable housing, through-block links and floor space for a range of non-residential uses.
- Create a transition in scale and typology at sensitive residential interfaces, including by providing ground floor setbacks, lower street wall heights and taller forms away from sensitive residential interfaces.
- Minimise overshadowing and wind impacts so as to contribute to a comfortable and safe public realm for pedestrians.
- Provide a sensitive design response that does not overwhelm any existing heritage building(s).
- Reduce the impact of building services on continuous active street frontages.
- Create human-scale streets by ensuring street wall heights respond to street and lane widths, residential interfaces and heritage context.
- Provide a continuous street wall edge rather than undercroft spaces.
- Ensure building features and upper storey balconies do not protrude outside title boundaries, excluding ground floor verandas and sun/overlooking protection devices.
- Encourage high-quality architecture and design in all development.
- Protect valued heritage qualities of MPAC.
Figure 4: Built form, street wall heights and solar access

MOONEE PONDS ACTIVITY CENTRE LOCAL PLAN
COMMUNITY FACILITIES

Delivering the MV2040 theme of Fair (Geente Boordup)

The key directions have been sourced from the MV2040 Strategy and the MV2040 Action Plan: Community Facilities document.

- Reinforce Puckle Street as the community anchor and support Moonee Valley racecourse to become the second community anchor by 2040.
- Redevelop the Civic Triangle to consolidate community facilities into a community hub accommodating multi-purpose, community hire and co-working spaces.
- Explore opportunities to relocate services from Shuter Street into the proposed Montgomery Park Children’s Centre and new community hub.
ACCESS AND MOVEMENT

Delivering the MV2040 theme of Connected (Yanininon Maggolee)

The objectives and key directions have been sourced from the MV2040 Strategy and MPAC Transport document.

OBJECTIVES

- Prioritise the movement network to reflect the following hierarchy:
  - 1. Pedestrians
  - 2. Cyclists
  - 3. Public transport users
  - 4. Local freight movements
  - 5. Private motorists
- Provide legible connections for all levels of mobility to all parts of MPAC.
- Encourage residents to cycle through improved street design and the provision of bicycle parking in developments.
- Reduce the impact of car parking on the attractiveness and useability of the centre.
- Ensure that streets are designed as safe, attractive, landscaped and pedestrian-friendly spaces.
- Create an excellent network of walking and cycling connections within MPAC and to other neighbourhoods, supporting an active and healthy community.

Sustainable transport

- Provide secure bicycle parking at the train station, as well as shorter term bicycle parking opportunities throughout MPAC.
- Provide high level bicycle parking by requiring a:
  - minimum rate of 1 bicycle space per dwelling
  - minimum rate of 1 bicycle space to each 150m² of net floor area for office development.
- Encourage office development to provide high quality end of trip facilities.

PRIVATE VEHICLE

- Alter car parking requirements for new developments by:
  - requiring a maximum rate of 1 car space per dwelling (irrespective of dwelling size)
  - requiring a maximum rate of 2 car spaces per 100m² net floor area for office developments
  - applying Column B maximum car parking rates for all other uses listed in Clause 52.06.
- Strengthen the vehicle circulation route (MPAC Loop) to minimise the negative impact of through traffic.
- Improve safety and the public realm with design treatments and by reducing speed limits within the MPAC Loop and shared zones.
Car parking

- Deliver no net loss of car parking in the activity centre.
- Consolidate off-street car parking towards the periphery of the activity centre by negotiating on a site by site basis for public use car parking in private developments.
- Reduce on-street, kerb side parking to improve the walking and cycling network, achieve wider footpaths, more public open space and outdoor dining opportunities.
- Install smart parking technologies to help direct motorists to more easily find an available parking spot.

Public transport advocacy

- Improve bus integration within MPAC, by simplifying movements at the Junction.
- Improve tram speeds and reliability by separating tram and motor vehicles along Mt Alexander Road and Ascot Vale Road.
- Improve access to public transport for pedestrians and cyclists.
- Explore the potential Puckle Street level crossing removal to improve vehicle, cyclist and pedestrian circulation.
ENVIRONMENTALLY-SUSTAINABLE DEVELOPMENT

Delivering the MV2040 theme of Green (Wunwarrn)

These objectives and key directions have been sourced from the MV2040 Strategy, MVH2 Streetscapes and Public Spaces and the Waste Management Plans – Guidelines for Planning Applicants documents.

OBJECTIVES

- Maximise energy efficiency and water conservation in new buildings.
- Reduce the impact of stormwater run-off on the drainage system by encouraging on-site stormwater infiltration.
- Encourage the use of sustainable and durable building materials that require minimal maintenance.
- Encourage landscape design that contributes to energy efficiency and minimises water use.

KEY DIRECTIONS

- Implement water sensitive urban design (WSUD) to improve local ecological resilience and stormwater filtration through treatments such as rain gardens, passive irrigation, structural soil and porous paving.
- Integrate garden bed planting into streetscape design to improve legibility and contribute to the character of each street.
- Integrate passive irrigation using surface stormwater run-off into new street trees and garden bed planting.
- Encourage continuous and consistent tree canopy cover to act as a major defining element for the street network.
- Ensure amenity, traffic, pedestrian safety and health are not adversely affected by waste management systems.
STREETS CAPES AND OPEN SPACE

Delivering the MV2040 theme of Beautiful (Nga-Ango Gungg)

The objectives and key directions have been sourced from the MV2040 Strategy, MPAC Transport, MPAC Streetscapes and Public Spaces and MPAC Public Open Space documents.

OBJECTIVES

- Encourage the creation of a variety of new public spaces.
- Ensure that public spaces have adequate access to sunlight and are sheltered from wind.
- Encourage a connected and well-signed network of laneways.
- Activate laneways through the provision of eateries, retail and entertainment uses.
- Encourage the incorporation of public art into new developments.

KEY DIRECTIONS

- Connect and pedestrianise laneways creating a cohesive network for improved pedestrian permeability and urban vibrancy.
- Ensure street furniture is a part of the holistic streetscape design and provides design responses sensitive to the context.
- Implement simple, refined and elegant external public lighting with potential for special lighting features in key pedestrian nodes and public open spaces.
- Reinforce the Heart of MPAC by creating generous raised shared areas that can be occasionally closed to traffic to become plaza space for events.
- Improve the function and vibrancy of the laneway network through lighting and other design features.
- Maximise the variety of resilient and vibrant green spaces, including a new open space at the Moonee Valley racecourse.
- Provide evenly distributed public open space in locations with good solar access, close to key pedestrian nodes (including shopping streets) and public transport hubs.
- Incorporate public open space opportunities through new private developments where possible.
- Achieve identified streetscape interfaces to improve amenity, walking and cycling and commercial opportunity in the centre.
- Reduce visual clutter by promoting signage that is innovative, subtle and integrated with design.
- Encourage public art and activation in key pedestrian nodes, public open spaces, plazas and laneways.
Artistic impressions of some of the key streets. The images show the proposed high level designs aimed at improving the pedestrian environment in the area. For further detail refer to the Moonee Ponds Activity Centre Streetscapes and Public Spaces document.

**Puckle Street**
(Indicative only)

- Green main street with continuous tree canopy
- Dedicated bicycle lane
- Central pedestrian prioritised zone
- Wider footpaths
- Vibrant footpath trading

**Hall Street**
(Indicative only)

- More tree planting and garden beds
- More public seating
- Wider footpaths
- Central pedestrian prioritised zone
Young Street
(indicative only)

- More tree plantings
- Street activation opportunities
- Vibrant and connected laneways
- Wider footpaths

Alexandra Avenue
(indicative only)

- Vibrant outdoor dining
- Wider footpaths
- New green boulevard
- Shared vehicle and bicycle lane
PRECINCTS

Precinct 1 – Civic and Community

To establish the precinct as the principal civic, community and transportation hub for MPAC.

Precinct requirements

- Connect the existing laneway to the east of Pascoe Vale Road.
- Large sites identified as 1A should:
  - deliver an east-west laneway to improve pedestrian access to Moonee Ponds Central and provide separation from the heritage site to the south
  - provide an active interface to Mt Alexander Road, Kellaway Avenue and Pascoe Vale Road and provide off-street servicing
  - respect adjacent heritage buildings by locating building mass away from sensitive interfaces
  - provide a minimum FAR of 1:1 (within the overall allowed FAR) to non-accommodation uses.

Precinct guidelines

- Support the delivery of an enhanced public transport interchange that improves pedestrian safety and amenity.
- Improve pedestrian links through the precinct from the retail core to Queens Park.
- Support the ongoing civic use of the Clocktower Centre incorporating services for the community, the performing arts and social and corporate activities.
- Encourage new development to contribute to the civic and community role of the precinct.
- Contribute to the character of the precinct by designing buildings that are ‘set in landscape’ with opportunities for deep soil planting.

Figure 7: MPAC study area and precincts

MOONEE PONDS ACTIVITY CENTRE LOCAL PLAN
Precinct 2 – Hall and Homer

To encourage retail, office and entertainment uses with accommodation on upper levels.

Precinct requirements
- Reinforce Hall Street as a human scale active street by delivering small scale tenancies (nominally 5m maximum width) set within a well-designed facade
- Large sites identified as 2A, 2B and 2C should:
  - deliver a ‘hybrid’ model of development that includes a mixture of building scales and typologies, including medium-scale development with carefully located towers
  - provide a sensitive interface to Taylor Street by locating medium-scale development at the north of the site (22m) and providing a ground floor landscaped setback (minimum 3m)
  - sites 2A and 2B should deliver north-south laneways with active frontages and pedestrian priority
  - site 2C should connect Hallkeeper Lane, to be designed primarily as a vehicle laneways for rear access
  - provide ground level public open spaces that complies with the design requirements set out in Moonee Ponds Activity Centre: Public Open Spaces document
  - provide ground floor setbacks on Hall Street, Homer Street and Eddy Street to support streetscape improvements and increased pedestrian activity
  - ensure the siting and design of buildings and works avoids overshadowing of any new ground level public open space
  - provide a minimum FAR of 1:1 (within the overall allowed FAR) to non-accommodation uses.

Precinct guidelines
- Connect the precinct with Puckle Street as the principal spine of MPAC.
- Enhance Hall Street as a major movement link connecting the station with the public transport interchange.
- Deliver mixed use development where the primary outlooks is to the street.
- Ensure pedestrians and street planting are prioritised by minimising crossovers on street frontages.
- Provide a connective laneway network.
- Minimise the impact of vehicle access and servicing on primary activity streets.
- Encourage vehicle access and servicing to rear laneways, particularly Hallkeeper Lane instead of Hall Street and Puckle Street.
**Precinct 3 – Young**

To encourage the use and development of land for retail, market, educational, medical and office uses.

**Precinct requirements**

- The large site identified as 3A should:
  - deliver a ‘hybrid’ model of development that includes a mixture of building scales and typologies, including medium-scale development with carefully located towers and ground floor communal open space
  - provide a sensitive interface to Gladstone Street by locating medium-scale development at the south of the site (22m) and providing a ground floor landscaped setback (minimum 3m)
  - reinstate Pratt Street as a human scale active street by delivering small scale tenancies (nominally 5m maximum width) set within a well-designed façade
  - deliver ground level public open space that complies with the design requirements set out in Moonee Ponds Activity Centre: Public Open Space document
  - provide a minimum 3m ground floor setback along Young Street to accommodate streetscape improvements and increased pedestrian capacity
  - ensure the siting and design of buildings and works avoids overshadowing of any new ground level public open space
  - provide a minimum FAR of 1:1 (within the overall allowed FAR) to non-accommodation uses.

- The large site identified as 3B should:
  - provide a sensitive interface to Gladstone Street by locating medium-scale development at the south of the site (22m) and providing a ground floor landscaped setback (minimum 3m)
  - provide a minimum 3m ground floor setback along Young Street to accommodate increased pedestrian capacity
  - provide a minimum FAR of 1:1 (within the overall allowed FAR) to non-accommodation uses.

**Precinct guidelines**

- Enhance pedestrian movement, safety and amenity through the laneways of the precinct.
- Deliver medium density mixed use where the primary outlook is to the street.
- Encourage heritage materials such as brick and bluestone in new developments fronting St Aidans Lane and Penny Lane.
- Provide active interfaces onto St Aidans Lane and Penny Lane and minimise the impact of servicing.
- Ensure pedestrians and street planting are prioritised by minimising crossovers on street frontages.
Precinct 4 – Puckle Street Retail Core

To maintain the precinct as the core retail spine for MPAC.

To maintain the heritage streetscape of Puckle Street.

Precinct guidelines

- Reduce through-traffic movements along Puckle Street.
- Ensure that development accommodates retail, entertainment and restaurant uses at ground level, with office and residential uses above.
- Deliver low scale mixed use developments where the primary outlook is to the street.
- Encourage party-walling to ensure that the fine-grain character of Puckle Street is retained.
- Design buildings that respond to the heritage character of Puckle Street.
- Provide adequate setbacks above heritage buildings, small scale tenancies and awnings.
- Ensure that buildings are designed in the round with consideration of how they are viewed when approaching Puckle Street.
- Reinforce Puckle Street as a human scale active street by delivering small scale tenancies (nominally 5m maximum width).
- Provide car parking and loading access via rear laneways.
Precinct 5 – Holmes

To provide for small scale office and retail development and medium density housing.

Precinct requirements

- Encourage sub-precinct 5A to be used for residential purposes.
- Encourage development along Holmes Road and Norwood Crescent with retail uses on the ground floor.
- Encourage development in sub-precinct 5B along Sydenham Street to incorporate small-scale office uses with residential uses on upper levels.
- Ensure any redevelopment at 1-9 Holmes Road includes community uses, such as a recreation facility or place of assembly.

Precinct guidelines

- Encourage the development of significant community facilities within Sub-precinct 5B.
- Maintain a built form scale that is respectful of adjoining residential areas.
- Improve east/west connections through the precinct.
- Deliver a low to mid-rise precinct with increased heights along the railway line and adequate separation between buildings including rear setbacks.
- Encourage primary outlook to the street.
- Provide a transition between low and mid-rise buildings by providing ground floor landscaped setbacks at sensitive residential interfaces.
- Reinforce Holmes Road as a primary street by delivering ground floor active uses.
- Encourage party-walling to ensure that the fine-grain character of Holmes Road is retained.
- Discourage side setbacks which can inadvertently encourage consolidation.
Precinct 6 – Shuter

To provide a focus for offices and community services, including medical suites and childcare.

Precinct requirements
- Encourage the establishment of medical and small scale office uses within the precinct, with residential uses above.
- Encourage development with residential uses at ground level along Moore Street.
- Ensure any redevelopment at 11-25 Shuter Street provides above ground car parking or public open space with underground car parking.

Precinct guidelines
- Encourage the integrated development of the precinct including a significant community use.
- Improve pedestrian connections to and from the precinct.
- Deliver ground floor active uses around the proposed Shuter Street park and contribute to safety by maximising opportunities for passive surveillance.
- Deliver a mid-rise precinct with adequate separation between buildings including ground floor rear setbacks.
- Encourage primary outlook to the street.
- Provide a transition between low and mid-rise buildings by providing ground floor landscaped setbacks at sensitive residential interfaces.
- Deliver ground level active uses along Shuter Street to contribute to its role as a primary active street with pedestrian priority.
Precinct 7 – Junction South

To encourage retail and entertainment uses to locate along Mt Alexander Road, with residential and office uses above.

To provide a progression of built form height, from lower scale development at the southern end of the precinct to taller built forms within the Junction.

Precinct requirements
- The large site identified as 7A should:
  - deliver publicly accessible ground level open space that complies with the design requirements set out in the Moonee Ponds Activity Centre: Public Open Space
  - provide a minimum FAR of 1:1 (within the overall allowed FAR) to non-accommodation uses.

Precinct guidelines
- Deliver a mid-rise precinct with heights increasing around the Junction.
- Encourage party-walling to ensure that the fine-grain character of Mt Alexander Road is retained.
- Discourage side setbacks as they can inadvertently encourage consolidation.
- Provide a continuous active street wall by providing servicing via rear lanes and streets.
- Provide a transition between low and mid-rise buildings by providing ground floor landscaped setbacks to sensitive residential interfaces.
- Encourage sub-precincts 7E and 7G to be used for residential purposes.
Precinct 8 – Dean

To encourage office and residential uses including home-based businesses.

Precinct requirements

- Provide ground floor setbacks on Alexandra Avenue and Dean Street to support streetscape improvements and increased pedestrian activity.
- The large site identified as 8C should provide north-south through block links to improve pedestrian permeability and break up massing.
- Sub precincts 8A, 8B, 8F and 8G should widen the rear laneway and ensure servicing is located from the street frontage.
- Large sites identified as 8A, 8B, 8C and 8D should provide a minimum FAR of 1:1 (within the overall allowed FAR to non-accommodation uses).

Precinct guidelines

- Deliver a low to mid-rise precinct with heights that provide an appropriate response to sensitive residential interfaces.
- Provide vehicle access and servicing requirements via rear lanes, where possible.
- Deliver ground level active uses along Alexandra Avenue to contribute to its role as a primary active street that connects the precinct to central Moonee Ponds.
- Deliver ground level active uses along Pascoe Vale Road to contribute to its role as a primary active street.
- Provide a transition between low and mid-rise buildings by providing ground floor landscaped setbacks to sensitive residential interfaces.
- Reinstate existing laneways if sites are redeveloped.
- Minimise overshadowing to future open space and private backyards.
Precinct 9 - Racecourse

To encourage residential, retail, commercial and employment opportunities that will enhance the role and function of MPAC and the Moonee Valley racecourse.

To encourage a street pattern, building design and land use mix that creates opportunities for street level activation, passive surveillance of the street and changing streetscapes.

To create new and vibrant public spaces for the community.

To enable taller and more intense built form in the eastern section of the precinct which provides for a transition in height from established residential areas to the north, south and west.

To ensure a street pattern and subdivision layout which encourage walking and cycling over other modes of transport.

To ensure a high standard of building design that displays dwelling diversity, permeability, flexibility, site responsiveness and environmentally sustainability.

To encourage diversity in housing opportunities, including affordable housing options.

Precinct requirements

- Ensure a Transport Assessment and Management Plan and Integrated Transport Plan is prepared, and that its based on an assessment of the likely transport impacts of the proposed full development of the precinct.
- Ensure new development is consistent with the relevant mandatory, discretionary and preferred maximum building heights.

Precinct guidelines

- Support the Moonee Valley racecourse as a significant sporting, recreational and employment asset.
- Encourage built form to response appropriately to sensitive interfaces in terms of scale, visual mass, overshadowing and overlooking.
- Ensure appropriate setbacks of upper levels of development from existing residential development.
- Consider the location and type of access to the site.
- Consider the interface with adjoining zones.
- Improve pedestrian connectivity between the precinct and the main part of the activity centre.
DELIVERY

Suite of planning controls
To achieve the vision for MPAC to 2040, a suite of mandatory and discretionary planning controls has been developed. The use of a range of controls will provide certainty for present and future generations encourage considered, evolving design outcomes that enrich the fabric of the centre. Specifically, the combination of mandatory and discretionary controls enable sensitive interfaces to be protected whilst accommodating the projected growth for MPAC.

Mandatory Floor Area Ratios (FARs)
Mandatory FARs set the total building floor area that can be developed based on the size of the piece of land - the ratio of development to land size. FARs ensure new development provides a contextual response to the site considering the overall vision for MPAC and the specific precinct objectives.

Discretionary maximum building heights
The FARs are applied with a discretionary building height (metres) to provide guidance of the expected typology and scale of new development.

Mandatory solar access controls
Mandatory solar access controls will protect sites from overshadowing and effectively cap development heights on some sites.

Discretionary wind assessments
Discretionary wind assessments apply to building and works over 20m or 15m on corner sites, and facilitate building design that minimises wind impacts for pedestrian comfort and safety at the street level.

Discretionary side and rear setbacks and building separation
Discretionary side and rear setbacks and building separation will improve internal and public amenity for new development and maximise development equity.

Mandatory rear setbacks – certain locations
Applies only to rear to rear boundary locations and is required where there is no laneway to separate sites.

Mandatory maximum building height - Puckle Street
Applies only to Puckle Street and is consistent with Planning Practice Note 59 due to Puckle Street’s high heritage value.

Discretionary residential interfaces and ground floor setbacks
Discretionary residential interfaces will provide sensitive interfaces to low scale residential uses in the periphery of MPAC, reduce visual bulk from the street level and facilitate an improved public realm.

Discretionary street wall heights and building setbacks (above the street wall)
Discretionary street wall heights and building setbacks (above the street wall) will provide a contextual response that relates to street widths, sensitive residential interfaces and heritage buildings.

Affordable housing uplift
An opt-in affordable housing uplift will facilitate the delivery of affordable housing by enabling new development to exceed the FARs by up to 0.5:1.
Moonee Valley Planning Scheme

The proposed changes to the Planning Scheme are to:

- introduce a new Schedule to Clause 37.08 Activity Centre Zone to implement the key directions of the Local Plan relating to built form, affordable housing, environmental sustainable design, wind, solar and bicycle requirements
- introduce a new Schedule to Clause 45.09 Parking Overlay to implement the key direction of the Local Plan and maximum rates for car parking
- introduce a new Schedule to the Clause 72.08 Background Documents to include the Local Plan, Affordable Housing, Built Form, Employment and Floor Space, Streetscapes and Public Spaces, Transport, Wind, and Built Form Testing C207/Moon Supporting Documents
- make relevant changes to the Municipal Planning Strategy and the local policy content of the Planning Policy Framework.

Implementation plan

The implementation of the initiatives outlined in the Local Plan will be delivered through various funding streams including the operational budget, Long Term Capital Works Plan and the proposed Development Contributions Plan. Implementation will align with the timeframes endorsed by Council in these documents. However implementation is also subject further cost and timeframe delivery factors which include, but are not limited to:

- capital works and operational budget priorities
- feasibility assessments and design development
- alignment with the implementation of other projects in the vicinity
- community consultation and input on specific projects
- State Government priorities and available funding
- negotiations with stakeholders/landowners through the planning process.
1. **Floor Area Ratio (FAR)**

- FAR is the ratio of total building gross areas above ground to the size of the subject site.
- Mandatory FAR provides direction towards the maximum possible yield on a site and enables development to have the appropriate floor plate depth and built form for different uses, architectural expression and other specific requirements, such as provision of open space.

2. **Height**

- Height is discretionary to enable flexibility in the built form within the mandatory FAR.
- Discretionary height provides an understanding of the expected scale of future development.
- An agreed amount of affordable housing can be considered to exceed the FAR.

3. **Street Wall**

- Maintain street character / scale / fine grain.
- Ensure good street wall height relationship to street width and context.
- Create good active uses along ground level.

---

**Mid North Coast City Council**
4. SETBACKS

- Encourage taller built form to have greater setbacks and building separation.
- Provide good outlook and daylight access between buildings.

5. SOLAR ACCESS

- Maintain good solar access to existing residential interfaces.
- Ensure future open space has good solar access.

6. OTHER CONSIDERATIONS

There may also be other site specific requirements to be considered in the building design and site layout, including:

- Ensure development has minimal wind impacts to ground level pedestrian comfort.
- Pedestrian through links to provide finer grain urban and access through site.
- Incorporate sustainability principles and ESD consideration.
- Streetscape height, built character, materiality, spacing and repetition of existing heritage buildings.
- Footpath widening for greater street level pedestrian amenity, such as bike parking.
Built Form Framework
Moonee Ponds Activity Centre
Prepared for Moonee Valley City Council
Post Consultation Revision

November 2019
This independent report has been prepared for Moonee Valley City Council. All due care has been taken in the preparation of this report. Hodyl + Co, however, are not liable to any person or entity for any damage or loss that has occurred, or may occur, in relation to that person or entity taking or not taking action in respect of any representation, statement, opinion or advice referred within this report.

cities people love

Hodyl + Co

Prepared by Hodyl + Co for Moonee Valley City Council
Project team: Leanne Hodyl + Bac Fitzgerald + Huei-Han Yang
www.hodyl.com

November 2019
Version 5

Moonee Ponds Activity Centre Built Form Framework | Hodyl + Co
## Contents

1. Introduction 11
   1.1 Scope
   1.2 Current development controls
   1.3 Method
   1.4 Study Area
   1.5 Related projects

### Part A: Context

2. Role and function of the centre 16
   2.1 Strategic context
   2.2 Population projections and floorspace demand
   2.3 Total floor space demand
   2.4 Current development settings
   2.5 Current development patterns
   2.6 Supporting higher density development
   2.7 Affordable housing challenges

3. Urban structure and character 27
   3.1 Existing positive attributes and opportunities
   3.2 Existing challenges and emerging issues
   3.3 Urban design analysis

4. Internal amenity 36
   4.1 Declining internal amenity
   4.2 Summary of development trends

### Part B: Discussion and testing

5. Determining a new built form strategy 42
   5.1 Understanding existing capacity
   5.2 Current and proposed approach for new development controls
   5.3 Alternative development controls
   5.4 Addressing identified strategic gaps
   5.5 Built form strategy
   5.6 Role of large sites

### Part C: Recommendations

6. Proposed development controls - MPAC area 72

7. Proposed development controls - Individual precincts 84

8. MPAC before and after 94

Appendix A - Preliminary built form testing
Appendix B - Summary of changes to document post-consultation

Moonee Ponds Activity Centre Built Form Framework | Hedjel + Co
Executive summary

This study has been prepared to inform the Moonee Ponds Activity Centre (MPAC) Pilot Project.

The Activity Centre Pilot Program was initiated by the Victorian Government to examine building heights in activity centres and the best method of providing greater clarity and certainty on what can be expected through new development.

The inclusion of Moonee Ponds in the pilot program followed concern that development activity in the centre was not delivering on the strategic objectives and identified preferred built form outcomes as identified in the Moonee Ponds Structure Plan (updated 2012). The debate was centred on the approval of the 40 Hall Street development which has been approved at a height of 20 storeys (double the preferred height control at the time of writing of 15 storeys).

Determining preferred built form outcomes

Building height is an important issue for Melbourne’s activity centres. Many of these centres have grown around traditional high streets that include significant heritage fabric and are surrounded by established low-scale residential neighbourhoods. The height of buildings impacts the overall scale and character, sunlight access and visual amenity within the centre. The height of new buildings is often the most contentious issue for the local community.

In order to provide considered guidance for the future development within the MPAC, this study considers an integrated assessment of built form issues, including height, and preferred built form outcomes for the centre.

It has been informed by a comprehensive review of the built form drivers for the MPAC and an analysis of existing conditions and emerging trends.

Key issues

The overdevelopment of sites, excessive heights and the lack of certainty of development outcomes are key issues within the MPAC. This is because at the time of writing the planning controls that it incorporates do not provide sufficient guidance to developers or the community on acceptable development outcomes. This lack of guidance is compromising the ability of the MPAC to realise its potential as a successful and well-designed Major Activity Centre.
A summary of these key issues includes:

The MPAC is not developing in a sustainable way that supports mixed-use development intensification.
- Development trends demonstrate that the residential market is dominant and is replacing commercial uses in the centre.
- There is no mechanism for the delivery of open space to support the proposed significant population growth.
- There is no mechanism for the delivery of affordable housing to support inclusive and sustainable communities.

The quality of the public realm is being undermined by current development trends.
- Buildings are being developed that are visually dominant with high street walls and limited upper level setbacks. If this trend continues it will result in a “canyon” effect and unwelcoming streets.
- Tall buildings are resulting in the overshadowing of key public spaces, including Puckle Street, and identified future open space such as the Shuter Street park site.

Poor internal amenity within development is common, particularly for recently completed residential developments.
- There is a reliance on outlook, daylight and sunlight from side and rear boundaries coupled with insufficient side and rear setbacks to deliver adequate amenity.

Development equity is being compromised through poor building siting and layout.
- The positioning of apartments on side and rear boundaries with limited setbacks will compromise the potential development of adjacent sites.

Key opportunities

There are a range of opportunities identified through the urban design analysis within this report. These include:

Maximise contribution of large sites
This study highlights the importance of larger development sites within the centre in delivering the strategic objectives for the MPAC. These large sites can assist in delivering:
- Commercial development
- New open space
- Affordable housing

The 40 Hall Street approval also demonstrates that the redevelopment of large sites has a significant impact on the MPAC. It is therefore especially important that all large sites make a positive contribution to the centre.

Increase height limits in some areas
Additional opportunities have also been identified to increase height limits in specific locations across the centre to support development intensification. This includes Puckle Street (by 1 storey only), Mt Alexander Road, Pascoe Vale Road and areas in close proximity to the train station. Overall, however, the testing demonstrates that a maximum height limit of 15 storeys is considered appropriate.
Recommended changes to the ACZ Schedule

To address these issues and pursue these opportunities this study recommends the following changes to the planning controls within the ACZ schedule:

1. Remove the interim mandatory height controls across the centre as they are constraining opportunities for site specific design responses. Considering the range of site sizes, shapes, orientation and levels of access, the mandatory height provisions are generally not the most suitable planning tool to support the sensitive design of development in the MPAC.

The exception is Puckle Street where a mandatory height control is appropriate considering the significant heritage character of the street. The height limit is recommended to increase from 3 to 4 storeys.

Further guidance in addition to height controls is required generally across the centre to address the current design issues that have been identified and which are resulting in poor development outcomes.

2. Revise existing centre-wide provisions as follows:
   
   - **Overall building heights** - building heights are proposed to increase in discrete locations to support development intensification and to decrease on other sites to respond to low-scale residential interfaces and adjacencies to narrow streets. The overall preferred maximum height limit of 15 storeys is appropriate to support significant development intensification while protecting the visual amenity of Puckle Street and adjacent residential areas (ensuring taller buildings don’t visually dominate).
   - **Street wall heights** - replace the current 3 storey street wall height control that applies across the whole centre with a control that relates to the adjacent street width and preferred character. This will generally lead to an increased street wall height control.
   - **Solar access controls** - remove overshadowing controls to Hall Street and Gladstone Street, which are unrealistic (and generally not applied) and introduce solar protection for key public spaces including Puckle Street (south side of street) and proposed public spaces identified in the MPAC.

3. Introduce new centre-wide provisions:
   
   - **Introduce a mandatory maximum Floor Area Ratio (FAR) control** on all sites except sites fronting Puckle Street. The pairing of a density control with discretionary built form envelope controls will support site-specific design responses and provide guidance on the application of discretion without the need for mandatory height controls.
   - **On large sites, introduce a policy requirement that a minimum of 1:1 FAR (within the overall FAR) should be dedicated to employment generating uses**.
   - **Introduce discretionary and in some instances mandatory, side and rear building setbacks**.
   - **provisions for some mandatory and discretionary rear and side setbacks will ensure good internal amenity and development equity**.
   - **Introduce a Floor Area Uplift (FAU) with a cap of 0.5:1 to support the delivery of social housing on all sites**.

4. Introduce revised precinct-scale design objectives that will guide preferred built form outcomes.

5. Introduce site specific guidelines for large sites to ensure that they maximise the contribution that they make to the sustainable long-term development of the MPAC. This includes, for example, new laneway connections.

The existing issues and proposed recommendations are summarised in Figure 1 to Figure 4.
Figure 1 Infill sites - summary of existing controls and development trends

Development yield exceeds 100% of the potential yield as defined by the building envelope controls. This is leading to the overdevelopment of sites and poor public and private amenity outcomes.

Existing 3-4 storey high street wall height consistently ignored, including on narrow streets creating a crowding effect.

Minor exceedences of height limits on infill sites.

Minimal to no side or rear setbacks. Many apartments face towards these boundaries meaning that the internal amenity for residents will be significantly compromised when the adjacent site develops and/or the adjacent site will be overly constrained leading to development inequity.

Figure 2 Infill sites - summary of proposed controls

Minor revisions to the preferred height controls which vary across the centre and provide guidance on the appropriate development scale.

Introduction of street wall height controls that respond to context.

Introduction of a Floor Area Ratio control. This supports the design of buildings with good levels of internal and public amenity. A FAR also supports the delivery of buildings that align with the preferred height controls.

Buildings either built with party walls to the side boundary or setback a minimum distance to ensure sufficient internal amenity.

Introduction of ground level rear setbacks and encouragement to build party walls on side boundaries. This facilitates high levels of internal amenity as apartments are located with the primary outlook to the street or rear boundary.

Moonee Ponds Activity Centre Built Form Framework | HADY + Co
Figure 3 Large sites - summary of existing controls and development trends

---

Significant deviation from preferred height limits

The 40 Hall Street approval includes a 30 storey tower that was double the preferred height limit of 15 storeys. This creates a high degree of uncertainty within the community about potential development outcomes. It also results in developments that have a greater impact on adjacent streets and open spaces.

Very high densities / overdevelopment

Significant densities aren’t supported by the current provision of open space and the narrow street network, and don’t align with the preferred character for the centre.

Lack of mixed use

Minimal commercial or retail development leading to limited job creation.

Poor public realm outcomes

Touring 17m high street wall height consistently tripped, including on narrow streets creating a canyoning effect.

---

Preferred height limit

Primary outlook from apartments

---

Moonee Ponds Activity Centre Built Form Framework | Hodgkison
**Figure 4** Large sites - summary of proposed controls

**Preferred maximum height controls**
Minor revisions to preferred height controls to limit overshadowing and step down building heights towards existing low-scale neighbourhoods.

**Density control**
Introduction of a Floor Area Ratio control for large sites to support the delivery of hybrid developments, varied building heights, new laneways and private open space and to manage overall site yield. This will mitigate the chance to exceed preferred height limits or concentrate heights and rear setbacks and building separation.

**New open space**
Large sites have the opportunity to contribute new public open space to improve the amenity of the centre.

**New through block links**
New streets and laneways will help to break up the large blocks and promote permeability.

**Minimum commercial development**
Introduce a policy requirement encouraging minimum commercial / retail development on large sites.
Puckle Street, the traditional high street within the Moonee Ponds Activity Centre
1. Introduction

1.1 Scope
This report has been prepared for Moonee Valley City Council to inform the Moonee Ponds Activity Centre (MPAC) Pilot Project.

Activity Centres Pilot Program
The Activity Centre Pilot Program was initiated by the Victorian Government to examine building heights in activity centres and the best method of providing greater clarity and certainty on what can be expected through new development.

Moonee Ponds Activity Centre was announced as part of the pilot program in December 2016. This followed concerns that recent development trends in the centre were not aligned with the preferred strategic and built form outcomes identified in the Moonee Ponds Activity Centre Structure Plan [updated 2012]. In particular, concerns focused on the approval of the 40 Hall Street development where the tallest tower, at 30 storeys, was at least double the preferred height limit of 15 storeys (see Figure 5).

1.2 Current development controls
Moonee Ponds Activity Centre Structure Plan, updated 2012
The structure plan is a reference document in the Moonee Valley Planning Scheme. It sets out the centre’s future role and function and preferred development outcomes. These are articulated through objectives and strategies for ‘buildings, design and public spaces’ which include preferred overall building heights which range from 2 to 15 storeys.

Activity Centre Zone (ACZ)
The preferred development controls included in the structure plan were introduced into the Moonee Valley Planning Scheme in May 2015 via Amendment C100.

Activity Centre Zone – Interim controls
Three activity centres are part of the pilot program - Moonee Ponds, Johnston Street (Dollingwood) and Ivanhoe. In each centre, the ACZ has been amended to introduce interim provisions while investigations into the preferred final controls takes place.
In Moonee Ponds, this incorporated a simple conversion of the discretionary height controls to mandatory provisions. The interim controls were introduced through Amendment C183 in October 2017 and will expire on 30th September 2020 when the mandatory height controls will revert to a discretionary provision.

Figure 5 Hall Street development – 3d model of approved development with ACZ preferred building envelope controls illustrated in red.
1.3 Method

This study is focused on investigating the preferred built form outcomes for the centre in order to provide clear recommendations on final built form controls. The report structure reflects the method that was used to prepare the recommendations. It is three parts:

Part A: Context
A comprehensive review of the key drivers that influence built form outcomes has been undertaken. This considers existing conditions and development trends in relation to:

- Supporting the strategic role and function of the MPAC (chapter 2)
- Responding to local character attributes and the need to deliver a high quality public realm (chapter 3)
- Delivering a high quality living and working environment through good levels of internal amenity (chapter 4).

This analysis led to the identification of the key issues and valued attributes that exist within the centre.

Part B: Discussion and Strategy
A critique of the efficacy of the existing controls at delivering the identified built form objectives is discussed and preferred planning tools identified (chapter 5).

This culminates in a preferred built form strategy (chapter 8). The preferred built form strategy was developed through an iterative process of site testing on a range of properties across the centre (see Appendix A).

Part C: Recommended changes to the AGZ
The recommendations are framed around the structure of the AGZ. This makes explicit the changes required to the current development control settings to deliver the built form strategy.

Informal consultation
An informal consultation was held in mid-2019 on the proposed recommendations. Additional built form testing was also undertaken by Fender Katsalidis architects (FKA). The feedback from the consultation and additional testing resulted in minor changes to the recommended heights and FARs on some sites. The built form strategy has been updated to reflect these changes.

This process is summarised in Figure 6 below.
1.4 Study area

The pilot project includes the majority of the activity centre excluding the Moonee Valley Racecourse site (see Figure 7).

1.5 Related projects

The following projects have also been progressed by the City of Moonee Valley to provide further clarity on the future of the MPAC:

- Moonee Valley 2040, which has set an overarching vision for the whole of the municipality, 2018.
- Streetscapes and Public Space Plan, which provides design direction on preferred open space locations as well as proposed street designs.
- Moonee Ponds Activity Centre: Streetscapes and Public Spaces (Moonee Valley City Council), 2019.
- Moonee Ponds Activity Centre: Public Open Spaces (Moonee Valley City Council), 2019.
- Moonee Ponds Activity Centre: Wind (Moonee Valley City Council), 2019.
Part A: Context

Overview

This investigation considers the overall growth of the centre (including its economic role in Moonee Valley) and the central city in order to establish a clear vision and development controls that support this growth. It also needs to balance development intensification with a tailored urban design response that considers the unique and valued attributes of the place and delivers a high-quality urban living and working environment.

Balancing objectives

Moonee Ponds has been identified as a Major Activity Centre. Major Activity Centres aren’t expected to accommodate the same level of housing and employment growth as Metropolitan Activity Centres such as Parkville, Box Hill or Footscray. They are, however, expected to support medium and higher density housing to support population and household growth forecasts.

This sets the scene for a significant scale of development across the centre. The MPAC is serviced by good levels of public transport services and has characteristics that make it suitable for redevelopment, including large under-utilised sites and at-grade carparking.

This is acknowledged in the structure plan which introduced height limits that support significant development intensification across the centre. These are particularly focused on large development sites.

Existing urban structure

The urban structure of the centre reflects historic patterns of growth. Many of the streets are very narrow and are supported by an even finer grain laneway network. This reflects the historical use of the area which included a mix of shops and worker’s cottages. A number of these original buildings remain. The subdivision pattern varies considerably including small, narrow sites (e.g. onto Puckle St or M’Alexander Road, south of the Junction) as well as larger sites (e.g. the existing supermarket developments) where smaller sites have been consolidated over time.

The historic and social centre of activity is Puckle Street which is characterised by low-scale, heritage shopfronts.

The redevelopment of 40 Hall Street and the Moonee Valley Racecourse will lead to a significant increase in movement and activity to the north and east of the centre.
2. Role & function of the centre

Between 2016 and 2040 the number of jobs in MPAC is expected to double to 14,000. The residential population is expected to more than triple from 3,000 to over 11,500 people. This report identifies that the total additional Gross Floor Area needed to support this scale of growth is approximately 372,000 m².

2.1 Strategic context

The Moonee Ponds Activity Centre is situated on the Craigieburn Railway Line and is approximately 6.5km to the north-west of Melbourne CBD. It is one of six Major Activity Centres in the local government area. The Union Road Activity Centre and the Racecourse Road Activity Centre are both within 2.5km of the MPAC.

The Parkville National Employment Cluster and the Footscray Metropolitan Activity Centre are both within 5km of Moonee Ponds and are directly accessible via tram (Parkville) and bus (Footscray) [see Figure 8].

The centre has attributes which support a significant scale of future development:

MPAC could well become a more substantial employment centre, as it has some of the key drivers of employment growth, including an inner city location, good access to a labour market, mixed land use and strong transport linkages. It would be a good outcome for it to grow as an employment centre, although this is contingent upon broad government support, and specific interventions to foster employment floorspace development.

This study needs to consider how built form outcomes support the realisation of this potential.

---

Figure 8: Moonee Ponds Activity Centre Strategic Context
2.2 Population projections and floorspace demand

Residential

Based on forecasts prepared by SGS consultants, the residential population of MPAC is expected to increase from approximately 3,500 people up to a population of 10,800 – 11,600 people between 2018 and 2040. This indicates that the population could grow more than triple in size in this period. This equates to an increase of up to 6,100 residents and approximately 4,050 dwellings (based on an assumption of 2 people per dwelling).

The Moonee Valley Racing Club master plan indicates that it will deliver in the order of 2,000 dwellings (approximately 4,000 people). This means that 2,050 dwellings will need to be accommodated within the remaining MPAC area to accommodate the projected residential population growth.

The total floorspace needed to deliver 2,050 dwellings is approximately 211,150m² (refer Table 1).

Employment

The future employment floorspace projections of the centre have also been assessed by SGS consultants.

Between 2016 and 2040, the number of jobs in MPAC is expected to double to 16,000. Of these, approximately 4,000 are forecast to be in the commercial sector and approximately 1,400 in the retail sector. The additional net floor area required to meet the employment projections to 2040 is over 160,000m².5

This will have direct impact on the preferred built form outcome for the area as the buildings required to support commercial activity are different to those required to deliver housing.

2.3 Total floor space demand

Together the projected need for additional residential and employment floorspace within the MPAC (excluding the racecourse site) is 371,150m².

<table>
<thead>
<tr>
<th>Residential</th>
<th>Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPAC Residential population increase 2018 - 2040 (upper estimate adopted)</td>
<td>8,100</td>
</tr>
<tr>
<td>Average no. of residents/dwelling a</td>
<td>2</td>
</tr>
<tr>
<td>Total no. of additional dwellings needed by 2040</td>
<td>4,050</td>
</tr>
<tr>
<td>Total no. of additional dwellings to be delivered in the Moonee Valley Racing Club master plan</td>
<td>2,000</td>
</tr>
<tr>
<td>Remaining total no. of additional dwellings to be accommodated in the remaining MPAC area</td>
<td>2,050</td>
</tr>
<tr>
<td>Average floor area per dwelling (gross within building) b</td>
<td>160m²</td>
</tr>
<tr>
<td>Total GFA needed to accommodate residential growth</td>
<td>211,150m²</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employment</th>
<th>Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total GFA needed to accommodate commercial growth</td>
<td>160,000m²</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total (Residential + employment)</th>
<th>Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total GFA needed to accommodate residential and commercial growth</td>
<td>371,150m²</td>
</tr>
</tbody>
</table>

Assumptions/sources:

a. ID Consulting. 2018 Household size.
b. Assumes an average apartment size of 75m² with an 80% overall floorplate efficiency rate - therefore an allowance of 60.75m² per apartment. This is increased by an additional 10% to allow for internal amenities resulting in an average floor space allowance of 133m² per apartment. Note it is assumed that all car parking is below ground and does not influence the floor area demand requirements.

Table 1 Estimated GFA needed to accommodate residential and employment floorspace.

SOS Economics & Planning, 2019, p32
SOS Economics & Planning, 2019, p29

Moonee Ponds Activity Centre Built Form Framework | Hodgkison & Co
2.4 Current development settings

The existing development settings are included within the Schedule 1 to the Activity Centre Zone within the Moonee Valley Planning Scheme.

Precincts

The Activity Centre Zone defines nine precincts within the MPAC (refer Figure 9). These precincts are grouped together according to the desired land use outcomes within these precincts.

Within the nine precincts there are 43 sub-precincts. The building heights vary within each precinct as the boundaries are determined primarily by land use, not built
form outcomes.

**Height controls**

There are six different discretionary height controls that apply in the Activity Centre (for the interim period, these are mandatory). These range from 11m (approximately 3 storeys) to 50m (approximately 15 storeys). The sites identified for high growth (32m and 50m height limits) are located to the south and north of Puckle Street.

The existing height limits are illustrated in Figure 10.

**Street wall heights (podium heights)**

A blanket 3 storey preferred street wall height is in place across the whole centre.

**Upper level street setbacks**

No designated setbacks apply.

**Side and rear setbacks**

No designated setbacks apply.

**Solar controls**

Solar access controls apply to Hall Street and sensitive residential interfaces. No clear performance measures are defined.

---

**Figure 10** Activity Centre Zones - existing height limits

---

*Moonee Ponds Activity Centre Built Form Framework | Hodgk + Co*
Planning for Activity Centres

Activity Centres are located across Melbourne to encourage the concentration of major retail, residential, commercial, administrative, entertainment and cultural development into activity centres that are highly accessible to the community. They are targeted as suitable locations for higher density development and play a key role in supporting the delivery of ‘20-minute neighbourhoods’. The role and function of each activity centre should relate to its classification in the activity centre network (metropolitan, major or neighbourhood), the policies for housing intensification and the public transport network.

Plan Melbourne identifies Moonee Ponds as a Major Activity Centre. Major Activity Centres are suitable locations for significant new education, justice, community, administrative and health facilities that attract users from large geographic areas.

Activity Centre Zone (ACZ)
The ACZ is the preferred tool to guide and facilitate the use of development of land in activity centres. The ACZ should be appropriately tailored to each location. The zone is intended to encourage a wide mix of uses and developments within a centre and to facilitate the use and development of land within the centre according to a defined framework - in this case, the Moonee Ponds Activity Centre Structure Plan (updated 2012).

Planning Practice Note 60: Height and setback controls for activity centres

This Practice Note provides guidance on the state government’s preferred approach to the application of height and setback controls for activity centres. It has been updated in response to the preliminary findings from the Activity Centre Pilot program.

It acknowledges the need to support development intensification. It notes that height and setback controls can be appropriate so long as they are not aimed at restricting the built form, but at facilitating good design outcomes. The application of height and setback controls must be ‘soundly based on the outcomes of strategic research and background analysis that demonstrates consistency with state and regional policy and includes a comprehensive built form analysis.’

The Practice Note states that a combination of discretionary and mandatory height and setback controls may be appropriate. Discretionary height and setback controls are preferred, with mandatory provisions supported when they are justified by robust and comprehensive strategic work, or where exceptional circumstances warrant their introduction.

The structure plan established preferred height controls which were then translated into the Activity Centre Zone as discretionary controls. This is common in many activity centres. The Activity Centre Pilot Program aims to address the issue of uncertainty associated with the use of discretionary controls.

---

6 Victorian Government, 2019
7 Victorian Government, 2019
8 Victorian Government, 2018a
9 Victorian Government, 2018b
2.5 Current development patterns

Development activity

There is increasing development pressure in the MPAC. Figure 11 identifies recent permit activity, and illustrates the number of development applications that have been approved or which were under assessment following the introduction of the current development controls in 2015. This is significantly higher than the number approved permits in the previous five years (2010-2015). The majority of development applications at the time of writing are for predominantly residential uses with minimal commercial floor area.

This assessment was undertaken by Moonee Valley City Council in mid-2017. An analysis of existing development trends within these recent permit is included in Section 4.

![Figure 11 Moonee Ponds Activity Centre Development Activity to December 2016. (Source: Moonee Valley City Council, 2017)](image-url)

Moonee Ponds Activity Centre Built Form Framework | Hodgkison + Co
Development potential

While some sites in the centre have heritage constraints or are recently developed, there remain a significant portion of sites still available for redevelopment (see Figure 12). This includes infill sites and a number of large development sites.

Large development sites

Figure 13 identifies remaining large potential development sites in the centre. There are 11 large sites that can support significant population growth and assist in delivering the strategic objectives identified for the MPAC. The sites identified are over 2000m² and have existing height limits of 6+ storeys. These large sites are likely to come under increased development pressure.

Figure 12 Development potential as influenced by degree of site constraints
(Source: Moonee Valley City Council, 2017)
2.6 Supporting higher density development

Open space

There are no public open spaces within the MPAC. Queens Park is located immediately to the north and offers significant amenity and character to the area. It is, however, difficult to access from the majority of the MPAC due to heavily trafficked streets and limited crossing points.

The lack of public open spaces also impacts the types of social activities that can be supported in the centre. As the number of people living and working in the centre increases, the lack of green spaces will become even more acute.

The Moonee Valley Open Space Strategy (2009) identifies additional open space requirements across the municipality. At the time, the study projected additional open space needed to 2020. This strategy assumed that by 2020 there would be a population of 14,627 within Moonee Ponds - the whole suburb, not just the MPAC. This has already been exceeded, with an estimated 14,952 people already living in Moonee Ponds.

Within the MPAC, by 2040 an additional 8,560 people are expected. There is no current strategic work to define future open space needs for this long-term population projection.

The Streetscapes & Public Space Plan does identify the shortage of public open space within the centre and identifies preferred locations for future public open space. These have been adopted for this report. These will be critical in improving the liveability of the centre, however, are still unlikely to be sufficient to meet the overall needs of the projected population growth to 2040.

Table 2 outlines the range of potential open space areas that could be required to accommodate the projected scale of population growth within the MPAC. These are based on varying potential open space provisions per person from 2m² through to 25m².

<table>
<thead>
<tr>
<th>Estimated projected population increase in MPAC</th>
<th>Potential open space provision per person</th>
<th>Additional open space needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>8,560</td>
<td>2m²</td>
<td>17,000m²</td>
</tr>
<tr>
<td></td>
<td>5m²</td>
<td>42,500m²</td>
</tr>
<tr>
<td></td>
<td>10m²</td>
<td>76,500m²</td>
</tr>
<tr>
<td></td>
<td>25m²</td>
<td>212,500m²</td>
</tr>
</tbody>
</table>

Table 2 Projected open space requirements

The Moonee Valley Racecourse Master Plan includes provision for a new large park in the order of 5000m², plus other additional open space up to 2000m² - a total of 7,000m².

It is outside the scope of this report to quantify open space needs for the MPAC. Opportunities to deliver additional open space, however, will need to be considered in the overall built form controls, particularly as the opportunity to deliver parks of reasonable size can only occur on existing privately owned sites.

The identified large sites [see Figure 10] within the MPAC offer the most suitable locations for additional open space. Some of these sites have already been identified as preferred sites for open space in the Streetscapes and Public Space Plan and further opportunity sites have been identified through this report.

Community infrastructure

Significant population growth will bring increased demand for local community facilities and services. The Moonee Valley 2040 Action Plan – Community Facilities (2018), identifies the development of a 'Moonee Ponds community hub vision and master plan for the civic triangle precinct' as a priority action for 2023-2025.

Importance of large sites

The 4D Hall Street development demonstrates the potential opportunities that larger sites within the MPAC can offer in regards to infrastructure provision. This is discussed further in Part B of this study.
2.7 Affordable housing challenges

There are no requirements for the provision of affordable housing within the MPAC. The Victorian Government has appointed a Ministerial Advisory Committee to investigate possible models and options to facilitate the supply of affordable housing in the Victorian Planning Scheme. The need for affordable housing is a state-wide challenge. Recent proposals to incentivise the delivery of affordable housing have been introduced in Melbourne’s central city (through the C270 Amendment) and within Fishermans Bend (Amendment GC31). The recently released Panel Report for Planning Scheme Amendment C309 (West Melbourne) supports a requirement for 6% of all dwellings to be delivered as social housing. Decision guidelines are provided on when it is reasonable for a development to not meet this requirement.

Statistics attained from ID Consulting (2018)12 note that no very low income households can afford rental accommodation in Moonee Valley. As measured over a 12 month period prior to 2018, just 0.9% of all rental listings would have been affordable to a household on a very low income.

Council’s recent submission to the redevelopment of DHHS housing land within the municipality identified the need to secure affordable housing that is provided ‘in perpetuity’. The need for affordable housing for low income earners as well as key workers was identified as a critical issue for the municipality.

Activity centres are identified at a state planning level as opportunities for significant residential growth. This is because they have high levels of access to public transport, jobs and other services and amenities. In order to create inclusive communities, it is essential that people from all backgrounds are able to live in well-serviced locations. This Pilot Project provides an important opportunity to address affordable housing within the identified growth areas across our suburbs.

Importance of large sites

Delivering a significant scale of new affordable housing is most readily achievable on large sites within the MPAC. All sites, however, could be considered for affordable housing delivery. This is discussed further in Part B of this study.
3. Urban structure and character

3.1 Existing positive attributes and opportunities

The character of the activity centre varies significantly. Some parts are in transition (for example, Hall Street) while others are relatively protected from change (for example, Puckle Street).

Positive urban elements that contribute to the character across the MPAC include:

- Puckle Street
- Fine-grain character
- Landmarks and vistas
- Heritage buildings
- North-south streets
- Contrasting building scales
- Laneways
- Boulevards

Puckle Street

Puckle Street is the traditional retail high street within the centre and forms the spine of the centre. It has a consistent character with a number of heritage buildings. It is primarily two storey shopfronts with awnings. The continuous line of the parapet is a defining feature and should be retained (see Figure 15). Sunlight access to Puckle Street is currently high and should be maintained.

Fine-grain character

MPAC includes a significant number of finely subdivided properties that create highly varied and interesting streetscapes. This is a valued quality that should be protected and enhanced through new development.

Landmarks and vistas

There are a number of landmarks within the Activity Centre. These should be protected and vistas to them maintained. These include the converted church at the southern end of Pratt Street (see Figure 16) and the Clocktower centre. This existing vista at the end of Pratt Street should be retained if the Woolworths site is redeveloped. Opportunities for landmark architecture at the termination of other north-south streets and at major intersections are encouraged. These vistas contribute to legibility and sense of place within...
the MPAC.

Heritage buildings
In addition to Puckle Street, there are several individually significant heritage buildings in the centre. Other heritage attributes include single storey detached dwellings and the Clocktower Centre, a well known landmark that is located at the intersection of Mt Alexander Road and Pascoe Vale Road.

Hatkimmers Lane, Puckle Lane and St Aldans Lane are intermittently lined with one-storey red brick fences and buildings. These interfaces are often at the rear of Puckle Street heritage buildings. Materiality and scale are important to consider in retaining the valued characteristics of these laneways. Preserving the valued character of these heritage buildings precincts as the MPAC redevelops is critical.

North-south streets
The primary streets in the centre run east-west. The secondary north-south streets and laneways within the MPAC provide the best opportunity for sunlight access during the middle of the day (see for example Pratt Street in Figure 17).

Contrasting building scales
There are already several buildings in the centre which are significantly taller than their surrounds. This contrasting scale can be expected in a precinct which has a mix of heritage and non-heritage buildings, differing lots sizes/ street widths and is transitioning towards higher density built form outcomes. Contrast can be a positive thing but managing amenity impacts on neighbouring properties is critical when considering whether it is appropriate in any given context (see Figure 18).
Existing solar access to Puckle Street

Solar access to the south side of Puckle Street is generally high providing a welcoming place to sit and socialise in the cooler months (see example in Figure 19).

Laneways

Laneways throughout the MPAC form a fine-grained network that is used by pedestrians and vehicles alike. The laneways vary in material quality, with some asphalt and others bluestone (see Figure 20).

Boulevards

Mt Alexander Road is a wide reserve that includes significant opportunities for additional trees and other landscape improvements.

Figure 19 Existing solar access to Puckle Street is generally high. This image was taken at 2pm - May 26th 2018.

Figure 20 Example of brick buildings fronting onto bluestone laneways
3.2 Existing challenges and emerging issues

Existing challenges and emerging issues include:

- Character and public realm quality of the Junction
- Diminishing street character and quality
- Overshadowing of key public spaces and streets
- Inadequate development controls to sensitive residential interfaces

The Junction

The intersection of Mt Alexander Road, Ascot Vale Road, Pascoe Vale Road and Puckle Street is dominated by traffic. Access to the bus interchange is poor and the predominantly low-scale buildings surrounding the junction do not provide a sense of enclosure to make the space feel more comfortable and protected (see Figure 21).

Street character

A key attribute of the MPAC is the network of narrow streets. New development within many of these streets incorporate high street walls, or minimal upper level setbacks above the street wall, which are visually dominant on the streetscape and reduce daylight and sunlight access to the street. This is particularly evident in recent Hall Street developments - see Figure 22 and Figure 23.

Figure 24 illustrates the potential outcome if these trends continue in Hall Street. This demonstrates the canyoning and overshadowing effect within the street.

Applying a blanket 11m podium height and street setback provision above the podium across the whole MPAC area is inappropriate as it fails to respond to context, street widths and the differing scale of buildings within the Activity Centre.

Figure 21 The Junction and bus terminal.

Figure 22 Current street wall height controls (left) and recent development trends in Hall Street (right) which if continued along the street could result in a canyoning effect. Note that this is diagrammatic and that 40 Hall St and 19 Hall St are located at different ends of the street.
Overshadowing

The predominance of east-west streets means that taller walls of continuous buildings will have a significant impact by overshadowing areas to the south of these streets. This is an emerging issue in Hall Street where the scale of new buildings (40 Hall Street and 19 Hall Street) have a significant impact on solar access across the centre.
Figure 25 Extent of overshadowing from the 40 Hall Street redevelopment (22 September equinox, 2pm)

Figure 26 Extent of overshadowing from the 40 Hall Street redevelopment (22 June solstice, 7pm)

Meonee Ponds Activity Centre Built Form Framework | Hodge + Co
Sensitive residential interfaces

The MPAC is situated within a low-scale residential context. Many single storey detached dwellings of distinctive character are located at the boundary. It is important to protect the amenity of these properties and create an appropriate transition in scale as the centre develops. This is particularly important on east–west streets that could be significantly overshadowed if sunlight controls aren’t in place.

The current development controls do not adequately consider the visual and overshadowing impact on these residential streets. These are illustrated in the figures below. This illustrates that the current controls are out of scale with the existing low-scale character.

Figure 27 Gladstone Street – immediate residential interface

Figure 28 Residential interface – visual impact of existing built form controls in Taylor Street

Figure 29 Residential interface – impact of existing built form controls in Gladstone Street

Figure 30 Residential interface – impact of existing built form controls in Dean Street
3.3 Urban design analysis

Built form controls are often drafted at a precinct scale which generates uniform built form outcomes across particular areas. In a place with a natural diversity of street widths and site sizes it is beneficial to consider how sites in the MPAC should respond to these particular attributes. This ensures that the diversity of the centre is enhanced as it develops.

Figure 31 is a summary of existing attributes and proposed open spaces and through-block links. The buildings interfacing the junction are of particular importance due to the existing low amenity of the junction and the prominence of these buildings along long vistas. Buildings interfacing this junction should be of the highest design excellence and frame this intersection.

Considering their importance, an independent design review should be a requirement.

Figure 31 Urban design analysis summary

- Primary activity streets
- Secondary activity streets
- Junction interface
- Laneways
- Retained and new through block links
- Large development sites
- Existing open space
- Proposed open space
- Large sites that could deliver open space
- Sensitive residential interfaces
- Heritage overlay
- Landmarks
4. Internal amenity

4.1 Declining internal amenity

The analysis of existing development patterns within the centre has highlighted the trend for poor internal amenity within new residential buildings. This is demonstrated in developments that include windows on side and rear boundaries with no or limited setbacks.

This means amenity of these sites is likely to be significantly reduced when the adjacent site develops. Alternatively, it could impede the redevelopment of the adjacent site which compromises the principle of providing development equity.

This is particularly an issue on constrained sites (see Figure 32) where multiple boundaries interface with adjacent private development sites. In principle, the greater the number of street interfaces the easier it is to deliver good levels of private amenity within a site.

On highly constrained sites, sufficient rear and side setbacks are necessary to deliver good levels of internal amenity.

4.2 Summary of development trends

The following assessments investigate in greater detail six of the 17 developments that have been approved within the MPAC since May 2015.

There are six different height controls that apply to the Activity Centre. A recent development permit approval in each of these six different height control areas was assessed for compliance against the current built form controls. Of the six sites assessed two out of six are considered aligned against the discretionary height controls with none of those sites exceeding the height control by more than 3m.

Only two of the approvals are aligned with the discretionary street wall height of 11m (Figure 33 and Figure 36) while the Hnel Street development has a street wall height of approximately 47m in one section (see Figure 37).

The Floor Area Ratios (FARs) of these developments were calculated to understand the relationship between height and density within the centre. This analysis demonstrates the non-linear relationship between FAR controls and height controls, for example, the Shuter Street development (see Figure 34) is significantly lower density than the Ascot Vale Road development (see Figure 35) despite being approximately the same height.

The FAR of the Ascot Vale Road development is higher because it has almost 100% site coverage and no side or rear setbacks. Instead the development has a party wall to the northern private boundary, and no setbacks from the street frontage or two lane way frontages. This demonstrates that high-density built form outcomes don’t necessarily result in taller buildings.
There are established urban design responses that support high levels of internal amenity. These include:

- Introduce ground level rear setbacks to provide access to outlook, daylight and sunlight.
- Introduce upper level rear and side setbacks to provide access to outlook, daylight and sunlight.
- Support greater levels of development on sites which can provide high levels of private amenity.
- Support party wall developments and higher structure walls within fine-grained streets to enable increased massing towards the street frontage where the greatest levels of amenity are provided.

Table 3 Interface analysis and relationship to site typology. The dots illustrate the mix of interfaces and how these collectively lead the degree of constraint for redevelopment. For example, sites that are least constrained have either: 3 street interfaces with 1 private interface; 2 street interfaces and 2 laneway interfaces; or 3 street interfaces and 1 laneway interface.

Figure 32 Degree of site constraints based on boundary interfaces within the Activity Centre.
The FAR of 40 Hall Street development is 14.88:1. This is a significant scale of density - much higher than is currently proposed in other inner city urban renewal areas such as Fishermans Bend (max 7.6:1) and West Melbourne (6:1). It is more comparable to the existing Melbourne CBD controls of 18:1 where the highest densities in the city are supported.

Table 4: Summary of analysed developments.
* Figures are approximate

<table>
<thead>
<tr>
<th>Figure No.</th>
<th>Address</th>
<th>Maximum Building Height</th>
<th>Approved Building Height</th>
<th>FAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 33</td>
<td>343-349 Ascot Vale Road</td>
<td>25m</td>
<td>25.3m</td>
<td>3.38:1</td>
</tr>
<tr>
<td>Figure 34</td>
<td>3-9 Shuter Street</td>
<td>20m</td>
<td>22m*</td>
<td>4.5:1*</td>
</tr>
<tr>
<td>Figure 35</td>
<td>348-350 Ascot Vale Road</td>
<td>14m</td>
<td>22.6m</td>
<td>6.23:1</td>
</tr>
<tr>
<td>Figure 36</td>
<td>31-43 Pickle Street</td>
<td>11m, 14m, 26m</td>
<td>9m, 26m*</td>
<td>4.3:1*</td>
</tr>
<tr>
<td>Figure 37</td>
<td>40 Hall Street Stage Two</td>
<td>50m</td>
<td>60m, 75m</td>
<td>16.08:1</td>
</tr>
<tr>
<td>Figure 38</td>
<td>26-28 Gladstone Street</td>
<td>32m</td>
<td>35m*</td>
<td>5.1:1*</td>
</tr>
<tr>
<td>- Moonee Valley Rozacourse</td>
<td></td>
<td>3-14 storeys (master plan)</td>
<td></td>
<td>3:1</td>
</tr>
</tbody>
</table>

Preferred Height 25m
Proposed Height 25.3m
FAR 3.38:1

Preferred Height 20m
Proposed Height 22m*
FAR 4.5:1*
Preferred Height 14m
Proposed Height 22.6m
FAR 6.23:1

Preferred Height 11m, 14m, 26m
Proposed Height 9m, 26m*
FAR 4.3:1*

Preferred Height 50m
Proposed Height 60m, 95m
FAR 14.88:1

Preferred Height 32m
Proposed Height 35m*
FAR 5.1:1*

Figure 35 368-380 Ascot Vale Road

Figure 36 31-43 Puckle Street *Figures are approximate

Figure 37 40 Hall Street Stage Two

Figure 38 24-28 Gladstone Street *Figures are approximate

Moonee Ponds Activity Centre Built Form Framework | Hedjel + Co
Part B: Discussion and Strategy

Since the introduction of the Activity Centre Zone controls between May 2015 and mi-2017, 19 development sites were approved. Of these 8 were within the preferred height limits while 9 exceeded them. The degree to which developments have exceeded the height limits vary with the greatest divergence evident in the 40 Hall Street development where the proposed Eversege Street tower is double the preferred height limit (30 storeys within a 15 storey height control area).

40 Hall Street
The 40 Hall Street site has been approved in two stages.

In 2016 a permit for Stage 1 of the development was issued on the direction of VCAT following a compulsory conference. Stage 1 includes a range of building heights from 6 to 23 storeys, 612 apartments and a mix of retail tenancies.

The permit application for Stage 2 was refused by Council in July 2016. The proposal ranged in height from 6 to 34 storeys. It included 993 apartments, retail tenancies and office spaces. An application for review was lodged with VCAT in August 2016. Revised plans reduced the maximum building height to 30 storeys and the number of apartments down to 655. An Advisory Committee was appointed in late 2016 to advise the Minister on the application.

The Committee noted that on face value an application for 30 storeys within a 14 storey height limit seemed a serious overdevelopment within the limited consideration of the preferred height. On detailed consideration of the evidence and submissions made, the Committee, however, supported a permit approval for the 30 storey height limit. They based their conclusion largely on: universal agreement amongst urban design and planning experts that the height of the Eversege Street building is of itself not an issue and a suitable design response; the need to see the Eversege Street building within the 'campus' style design of the whole site; approval by Council through the VCAT process of Stage 1 up to 23 storeys; seven storeys over the preferred height' (Advisory Committee Report, 2017).

Specifically, they noted that the "proposed building heights ... have had regard to the preferred building heights in the Moonee Valley Planning Scheme" (Advisory Committee Report, 2017). This clearly states that the Committee considered that a 30 storey building was aligned with the design objectives and outcomes sought in the ACZ Schedule.

There was significant concern, however, in the community in regards to this decision. It also brings into question the validity of the current height controls in the ACZ if a building of much greater height is assessed as meeting the overall objectives of the ACZ.

Key questions
This raises key questions which are discussed in this chapter:

- Do the current development controls support the delivery of sufficient floor area to meet projected demands?
- To what degree have the current development controls created some of the identified built form issues?
- What revisions are required to the current development controls to address these issues and take advantage of the opportunities to enhance the centre identified through chapters 2-6 of this report?
- What is the role of discretionary and/or mandatory controls?
- How could revised development settings address the strategic gaps identified (commercial development, affordable housing, open space)?
- What is the role of larger sites?
5. Determining a new built form strategy

5.1 Understanding existing capacity

An overarching objective of the MPAC is to support development intensification to deliver housing supply and support economic development. This has been part of the rationale for supporting developments that exceed the current height limits. In order to understand the alignment of the current development controls to projected housing and employment floorspace demand, the existing development controls have been modelled for the whole of the centre. This enables a thorough assessment of how the controls work across the wide range of site conditions to test potential development capacity.

The building assumptions used in the model are noted in Table 5. The following sites were excluded from this testing:

- Recent development approvals [30 March 2015 - 1 November 2017]
- Strata-titled residential developments
- Individually significant buildings in the Heritage Overlay
- Sites with developments currently under construction.

The sites identified for development potential are illustrated in Figure 39.

Figure 39 identified sites with development potential [Source: Moonee Valley City Council]
Figure 43 3D testing of the existing built form envelope controls in the MPAC

<table>
<thead>
<tr>
<th>Type of built form control</th>
<th>Why was an assumption made?</th>
<th>Assumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Setbacks</td>
<td>Design and Development controls specify that buildings should be setback from the street above 11m in height. No distance is specified in the controls. A modest front setback above an 11m podium was adopted.</td>
<td>11m podium height 3m front setback above podium</td>
</tr>
<tr>
<td>Building Depth (Large sites only)</td>
<td>For large sites, buildings above the street wall were modelled to a maximum depth of 24m in one direction at upper levels to ensure that residential dwellings with adequate internal amenity could be delivered.</td>
<td>24m building depth at upper levels for large sites</td>
</tr>
<tr>
<td>Building Separation (Large sites only)</td>
<td>A minimum building separation within building sites was used for all levels above the street wall height.</td>
<td>12m building separation at upper levels</td>
</tr>
<tr>
<td>Solar Access Guidelines</td>
<td>Test to determine adequate solar access wasn’t defined in the controls. A commonly used solar access test was adopted.</td>
<td>No overshadowing between 10am and 2pm on 22 September (Spring equinox)</td>
</tr>
<tr>
<td>Ground Floor Setbacks</td>
<td>Precinct guidelines specified that ground level landscaped setbacks should be provided at Residential Front Interface - Type 2. No distance was specified in the controls. A modest ground floor setback was adopted.</td>
<td>Residential Front Interface - Type 2 3m Ground Floor Setback</td>
</tr>
<tr>
<td>Through-Block Links</td>
<td>Through-block links were identified on the map, but no design requirements were specified. An open to the sky standard width laneway was adopted.</td>
<td>6m laneway width open to the sky</td>
</tr>
</tbody>
</table>

Table 5 Assumptions applied to built form controls in capacity modelling

Moonee Ponds Activity Centre Built Form Framework | Hedjyl + Co
Capacity within existing building envelope controls

The 3d modelling of existing built form controls illustrates the scale of development that is generally supported by the existing building envelope controls but does not demonstrate realistic building designs. For example, no side or rear setbacks have been adopted on most sites. This is not realistic as there will be a need to setback buildings to provide access to daylight and outlook and to deliver manageable floorplate depths.

The capacity of each site to reach the potential yield available within the building envelope control varies, however the individual site testing (see Appendix A) illustrates that it will be higher for infill sites and lower for larger sites. This is because larger sites are required to include more space between buildings within the site to support good levels of internal amenity and additional access (e.g. new laneways). On smaller sites, this level of amenity is provided through frontages to existing streets and laneways. This means that the potential GFA must be moderated to make allowances for the reduction in potential yield that is possible on each site.

In order to consider the realistic capacity of the centre, sensitivity testing has been applied to determine what the potential yield could be. This is demonstrated in Table 6 which lists the Gross Floor Area (GFA) that could be supported based on the resultant average Floor Area Ratio (FAR) across each precinct for three scenarios:

- Scenario 1: The 3d testing of existing envelopes (unrealistic building designs)
- Scenario 2: Capacity adjusted to 75%
- Scenario 3: Capacity adjusted to 50%

The testing demonstrates the following outcomes:

- Scenario 1: Potential capacity is 1,107,281 m². Average potential FARs range from 2.3 - 6.5. The average FAR across the entire centre was 5.7.
- Scenario 2: Potential capacity is 830,461 m². Average potential FARs range from 1.7 - 6.4. The average FAR was 4.2.
- Scenario 3: Potential capacity is 583,641 m². Average potential FARs range from 1.2 - 4.3.1. The average FAR was 2.8.

The GFA needed to support the projected increase in residential and worker population is 391,750 m² by 2040 (see Section 2.3). The existing development controls (and height limits) therefore readily accommodate the projected growth to 2040 as the scenario with the lowest capacity (Scenario 3) still exceeds forecast floorspace requirements by more than 40%.

<table>
<thead>
<tr>
<th>Precinct</th>
<th>Site Area m²</th>
<th>Potential yield (100% of built form envelope) m²</th>
<th>FAR</th>
<th>Potential yield (75% of built form envelope) m²</th>
<th>FAR</th>
<th>Potential yield (50% of built form envelope) m²</th>
<th>FAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civic and Community</td>
<td>8,244</td>
<td>4,9718</td>
<td>5.5</td>
<td>34,289</td>
<td>4.2</td>
<td>22,889</td>
<td>2.8</td>
</tr>
<tr>
<td>Hall/Horroper</td>
<td>48,086</td>
<td>409,997</td>
<td>8.5</td>
<td>207,423</td>
<td>6.4</td>
<td>204,949</td>
<td>4.3</td>
</tr>
<tr>
<td>Young</td>
<td>29,509</td>
<td>174,356</td>
<td>6.6</td>
<td>105,767</td>
<td>4.9</td>
<td>97,178</td>
<td>3.3</td>
</tr>
<tr>
<td>Puckle</td>
<td>26,246</td>
<td>77,410</td>
<td>2.9</td>
<td>98,098</td>
<td>2.2</td>
<td>83,063</td>
<td>1.5</td>
</tr>
<tr>
<td>Holmes</td>
<td>19,695</td>
<td>45,473</td>
<td>2.3</td>
<td>34,105</td>
<td>1.7</td>
<td>22,737</td>
<td>1.2</td>
</tr>
<tr>
<td>Shuter</td>
<td>4,329</td>
<td>20,335</td>
<td>4.6</td>
<td>15,206</td>
<td>3.5</td>
<td>10,018</td>
<td>2.1</td>
</tr>
<tr>
<td>Junction South</td>
<td>30,986</td>
<td>13,139</td>
<td>4.2</td>
<td>99,482</td>
<td>3.2</td>
<td>45,655</td>
<td>2.1</td>
</tr>
<tr>
<td>Dean Street</td>
<td>34,318</td>
<td>183,062</td>
<td>5.3</td>
<td>137,312</td>
<td>4.0</td>
<td>91,541</td>
<td>2.7</td>
</tr>
<tr>
<td>Total GFA and average FAR</td>
<td>191,811</td>
<td>1,107,281</td>
<td>5.7</td>
<td>850,441</td>
<td>4.2</td>
<td>552,641</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Table 6: Existing development capacity in the MFAC, including sensitivity testing to take account of site constraints.
5.2 Current and proposed approach for new development controls

The following table is a summary of key issues identified within this study, the extent to which they are addressed in the Structure Plan and the current Activity Centre Zone schedule and recommended means of addressing this issue.

Table 7 Summary of key design issues

<table>
<thead>
<tr>
<th>Identified design issue</th>
<th>Guidance provided in the Structure Plan</th>
<th>Current control in the ACZ and current compliance</th>
<th>What built form guidance is needed to address this issue?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Lack of commercial floor space within new developments</td>
<td>Economic opportunities:</td>
<td>No control to ensure provision of commercial uses</td>
<td>Support for commercial uses on large sites through a minimum requirement for commercial development.</td>
</tr>
<tr>
<td></td>
<td>Objectives:</td>
<td>Objectives are included in the land use and development section including the objective to:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘To develop a truly diverse and economically vibrant Activity Centre which reinforces its role as a regional centre...’</td>
<td>‘...create a highly competitive centre with a strong reputation in property growth, service provision, the arts, cultural diversity, economic development, business support and recreational opportunities’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘To reinforce the centres retail role through large “anchor” developments at the Birkland and Readings sites and any anticipated reconfiguration of the existing Saleway site’</td>
<td>Specific commercial uses are included in the Table of uses and Precinct provisions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘To ensure major retail and office developments occur within the Activity Centre boundary.’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strategies</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘Market and promote key strategic investment sites identified in the overall MPAC Structure Plan to realise the full development opportunities of these sites.’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Additional strategies include encouraging retail uses in appropriate locations, activation of key sites through place-making, encouraging non-residential uses at periphery into the retail areas, creating better linkages between existing activity generators and expanding the regional medical and education role that MPAC could provide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Insufficient open space to support population growth</td>
<td>‘Community sites’ nominated which could include open space</td>
<td>Community sites included within precinct provisions:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Creation of new public spaces is encouraged.</td>
<td></td>
</tr>
<tr>
<td>3. Lack of affordable housing</td>
<td>Objectives</td>
<td>5% affordable housing requirement</td>
<td>Requirements for developers to deliver new open spaces.</td>
</tr>
<tr>
<td></td>
<td>‘To encourage a diverse range of housing choices and affordability within the MPAC which caters to various residential needs of a growing community.’</td>
<td>in Precinct 9outside of the scope of this study.</td>
<td></td>
</tr>
<tr>
<td>Identified design issue</td>
<td>Guidance provided in the Structure Plan</td>
<td>Current control in the AGZ and current compliance</td>
<td>What built form guidance is needed to address this issue?</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------------------------</td>
<td>-----------------------------------------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td><strong>Public realm quality (see Part 3)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Poor quality streets</td>
<td>No maximum street wall height is nominated.</td>
<td>A generic street wall provision of 11m (discretionary) is applied across the Activity Centre. Above this a setback should be provided (no dimension is nominated). The analysis demonstrates limited compliance to this provision.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Objectives</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>To ensure new development interacts with the public realm providing a positive experience at the street level for all users.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Strategies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>New built form will be designed to integrate with the street.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Built Form Guidelines</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘Generally built form within the centre should aim to achieve a height of 3 storeys or more where possible, and incorporate a minimum street/fanway facade of 8 metres inclusive of parapet, awning and shopfront style facade... generally the aim should be to achieve 4 storeys or more to the central areas of the MPAC, and 3 storeys or more to the fringe areas of the MPAC.’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘Built form should respond to the orientation of the site, any adjoining streets and lanes, and nearby public open spaces through setback requirements and massing to ensure that daylight and direct sunlight is maximised to street level public and pedestrian spaces. This will require varied setbacks and heights at different locations, according to the site specific orientation and adjoining properties.’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Overall poor design outcomes due to the overdevelopment of sites</td>
<td>The Structure Plan focuses on concerns in regards to potential underdevelopment of sites. Height limits provide guidance on potential development scale. Design quality is guided by ‘DPC’s Activity Centre Guidelines 2000 and ‘Guidelines for higher density residential development’ and Council’s local policy for ‘Residential development of four or more storeys’</td>
<td>No overall control on yield. Discretionary height controls only with limited side and rear setback requirements which are not always being met.</td>
<td>Density controls (FAS) in combination with preferred building envelopes.</td>
</tr>
</tbody>
</table>

[Image: Moonoo Pends Activity Centre Built Form Framework | Hodgk + Co]
<table>
<thead>
<tr>
<th>Identified design issue</th>
<th>Guidance provided in the Structure Plan</th>
<th>Current control in the ACZ and current compliance</th>
<th>What built form guidance is needed to address this issue?</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Poor street interfaces in low floors of buildings</td>
<td><strong>Objectives</strong>&lt;br&gt;To ensure new development interacts with the public realm providing a positive experience at the street level for all users.*&lt;br&gt;&lt;br&gt;<strong>Strategies</strong>&lt;br&gt;'New built form will be designed to integrate with the street'</td>
<td>No specific controls for activation of streets.</td>
<td>Urban design policy rather than prescriptive guidance.</td>
</tr>
<tr>
<td></td>
<td><strong>Built Form Guidelines</strong>&lt;br&gt;All built form within MPAC should act as 'breezeway' for the surrounding public spaces, whether they are streets, lanes, squares, plazas, malls, or other spaces pedestrians can inhabit at ground level...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Sunlight access to streets is being diminished</td>
<td><strong>Objectives</strong>&lt;br&gt;To ensure new development interacts with the public realm providing a positive experience at the street level for all users.*&lt;br&gt;&lt;br&gt;<strong>Built Form Guidelines</strong>&lt;br&gt;'... in order to provide safe, secure, welcoming, aire, and comfortable the surrounding built form needs to respond to the public space through articulation of height and massing [for overshadowing and daylight]'</td>
<td>The sunlight access controls are vague and the tests in place are not clearly defined. This undermines the intention to protect solar access and has led to the controls being largely ignored in recent development applications.</td>
<td>Solar access controls for existing keyspaces and proposed open spaces. Revised height limits that align with overshadowing controls.</td>
</tr>
<tr>
<td>7. Interfaces to existing residential development do not adequately respond to this existing low-scale context.</td>
<td><strong>Objectives</strong>&lt;br&gt;'To ensure that the scale of development will not be detrimental to surrounding residential areas of the Activity Centre'*&lt;br&gt;&lt;br&gt;<strong>Strategies</strong>&lt;br&gt;'New development within MPAC will be well-designed to respect the interface and amenity of the residential areas on the periphery of the Activity Centre'</td>
<td>Ground floor landscape setbacks apply to Taylor Street and Gladstone Street but no distance is specified in the control. Provision for deep sets is required if these setbacks are to accommodate mature landscape trees. Reconsider setback provisions apply to side and rear interfaces (even though these are intended to apply to development that is four storeys or less).</td>
<td>Revised height limits of interface areas. Revised ground plane setbacks.</td>
</tr>
<tr>
<td></td>
<td><strong>Built Form Guidelines</strong>&lt;br&gt;'... proposed new built form should sensitively transition between the relatively standard residential neighbourhood character of surrounding suburbs and the more urban grain of the Activity Centre... Ensure a transition is made from the significantly greater heights of the MPAC core (15+ storeys) down to the 2-3 storeys of residential uses'</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**ATTACHMENTS – ORDINARY COUNCIL MEETING**

**ITEM 10.5 - ATTACHMENT B**

<table>
<thead>
<tr>
<th>Identified design issue</th>
<th>Guidance provided in the Structure Plan</th>
<th>Current control in the AGZ and current compliance</th>
<th>What built form guidance is needed to address this issue?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal amenity (see Part 4)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Poor internal amenity</td>
<td>No sides or rear setbacks provisions are nominated. <strong>Built Form Guidelines</strong>  Built form heights should seek to maximise solar access into internal floors to the building whenever possible, particularly residential buildings. For commercial buildings sunlight access should be a priority within the design</td>
<td>Rear setbacks apply at low-scale residential interfaces only. No guidance is included for side setbacks above the podium to provide adequate building separation at the upper levels of buildings. This has an impact of outlook, privacy and daylight resulting in poor internal amenity.</td>
<td>The Better Apartment Design Standards (BADS) identify the importance of side and rear setbacks to deliver internal amenity. They do not nominate a preferred distance, rather they recommend that preferred setbacks are identified for each local setting. Side and rear setbacks, Building separation:</td>
</tr>
<tr>
<td><strong>7. Lack of development equity</strong></td>
<td>See above - Poor Internal Amenities.</td>
<td>See above - Poor Internal Amenities.</td>
<td>Side and rear setbacks, Building separation:</td>
</tr>
<tr>
<td><strong>8. Laneway interfaces</strong></td>
<td><strong>Objectives</strong>  To improve and create additional movement links between the north and south areas of the centre  <strong>Strategies</strong>  ‘Build on the laneway experience through activation of niche cafe/restaurant uses and creating a connected and well defined network providing dual frontages’</td>
<td>There is no specific mention of upper level laneway setbacks.  • It is unclear whether the construction of a laneway as part of a new development would trigger a setback above a podium.  • There are no minimum widths prescribed or design guidelines for the through-blocks proposed in the controls</td>
<td>Lower street wall heights and upper level setbacks:</td>
</tr>
<tr>
<td><strong>9. Heritage</strong></td>
<td><strong>Objectives</strong>  To ensure that development in NPAC provides a high quality built form that is adaptable, innovative, sensitively designed, responsive and reinforces the centre’s heritage character  <strong>Built Form Guidelines</strong>  ‘Encourage a mixture of modern and attractive architectural forms blending with heritage built form’</td>
<td>Appropriate development on heritage sites can be challenging and requires flexible built form controls to ensure the design response adequately manages interfaces and is site specific.</td>
<td>New design objectives to address appropriate responses in heritage context within present provisions:</td>
</tr>
</tbody>
</table>

---

*Moonoo Activity Centre Built Form Framework* | Hodg + Co
A summary of the key issues and recommended strategies for addressing them are illustrated in Figure 41.

Figure 41 Summary of key design issues and recommended strategies.
5.3 Alternative development controls

Benefits of discretionary (performance-based) vs mandatory height controls

Practice Note 60 is clear that discretionary controls are generally preferred in activity centres, however that mandatory controls are appropriate in certain circumstances. The issue of certainty is of critical concern in the Activity Centre Pilot program which at its core is focused on providing clarity on suitable development outcomes in the centre.

Mandatory controls do provide the most definitive way to deliver certainty. In the analysis of the current issues in the MPAC, however, the key concerns that have been identified (see chapters 2-4 and section 5.1) are not just the lack of certainty but the lack of clear guidance on the preferred development outcomes and the quality of the development that is being delivered. Updating the AG2 to provide this guidance and improve built form outcomes will go a long way to addressing the current built form issues.

This study highlights that the MPAC is characterised by a diverse mix of buildings (in scale, architectural styles and condition), variable heritage attributes, a range of lot sizes and shapes, and varying street and laneway widths and orientation.

Considering the desire for certainty within the MPAC it is tempting to default to a preference for mandatory controls to guarantee the blanket protection of low-scale character and heritage attributes. This could result, however, in an oversimplified approach to managing these areas.

Focusing new development controls on key identified issues

Only a small number of developments have resulted in a significant divergence from the current height controls. Of greater concern is:

- The blanket street wall height control which has no relationship to street width and which is being ignored in a number of development applications.
- The lack of rear and side setback controls results in developments that have poor internal amenity (which will be further reduced when adjacent sites redevelop).

Excessive street wall heights and insufficient side and rear setbacks is the result of site overdevelopment. It is important that the overall intensity of development is kept to levels commensurate with delivering the preferred built form outcomes.

An accepted way of doing this is to combine discretionary built form envelope controls with a mandatory density control. This has been introduced into Melbourne’s central city and Fishermans Bend and is proposed for West Melbourne. It is also an established method of delivering high-density development in many Australian cities.

The pairing of a mandatory density control with a discretionary envelope control supports the delivery of site specific design responses (see Figure 42).
Other benefits of a Floor Area Ratio

A FAR can also deliver a number of benefits that will be directly relevant within the MPAC context:

- Certainty of overall development yield (and therefore reduced risk and speculation).
- Reduced pressure on side and rear setbacks (improving internal amenity).
- Flexible design outcomes that support site specific design responses.

Floor Area Uplift

Recent planning reviews in central Melbourne have recommended the inclusion of a FAU which enables additional development above the yield delivered through a FAR. Any potential additional yield must be carefully managed and focused on delivering identified public benefits. In Fishermans Bend, an uplift dedicated to the provision of social housing has been adopted.

Figure 42 Examples of how a building envelope control paired with a density control can support design flexibility.

This example shows the same 4:1 FAR paired with a 10 storey height limit. A diversity of design responses can be delivered. The degree to which the enveloped is "filled up" in these examples is 40% (calculated by dividing the FAR of 4 by the height limit of 10 storeys).
How do Floor Area Ratios (FARs) work?

FARs are defined as the ratio of a new building’s total floor area in relation to the size of the piece of land it is being built on. A FAR is calculated by dividing the total floor area built on a site by the total site area as follows:

\[
\text{Floor Area Ratio (FAR)} = \frac{\text{Total floor area of a building}}{\text{Gross developable site area}}
\]

For example, if a FAR of 3:1 applies to a site of 600m², the developer can build a total floor area of 1,800m² (3 x 600m²). While this guides the total amount of floor area that can be developed, it does not directly dictate how the new development should be designed as it is possible to create a variety of building heights and layouts within a set ratio. For example, the diagram below illustrates two different ways that the 1,800m² of floor area could be delivered on this site. This demonstrates how a FAR control can help to support housing diversity within a given area.

E.g. A 5 storey building that covers 100% of the site area

How do Floor Area Uplifts (FAUs) work?

A FAU allows a developer to build more floor area on a site (above that allowed by the FAR) in exchange for making a contribution that is of a public benefit. It is calculated by dividing the additional floor area built on a site by the total site area as follows:

\[
\text{Floor Area Uplift (FAU)} = \frac{\text{Potential additional floor area of a building over the original floor area allowed through the FAR control}}{\text{Gross developable site area}}
\]

The public benefit should be aligned with the identified needs of the community. It commonly includes, for example, affordable housing, open space or community facilities. A FAR of 3:1 enabled a total floor area of 1,800m² to be built on a 600m² site. If a FAU control of 1:1 was in place then this would allow the developer to build an additional 600m² of floor area on their site.

E.g. A FAR of 1:1 would enable an additional storey to be built across the whole site.

E.g. A FAU of 1:1 would enable an additional two storeys to be built on 50% of the site.

Figure 43: Explanation of how FARs work

Figure 44: Explanation of how FAUs work
5.4 Addressing identified strategic gaps

The analysis identified three key strategic gaps in supporting the development intensification of the MPAC (See Chapter 2). These are:

- Lack of open space
- Insufficient support for commercial development
- Lack of mechanism to deliver affordable housing

Delivering open space

Delivering open space on private land is a common practice that ensures open space delivery increases as population increases. 40 Hall Street and the noeourse site have committed to delivering open space. Other opportunities have already been identified in the Streetscapes and Public Space Plan and include a potential open space on the council-owned Shuter Street carpark. An additional four other private sites have been identified that would be suitable for the delivery of a new open space - these are identified in Figure 45.

Public open space design requirements

In the instance that a public open space is proposed on private land, the responsible authority must decide where the nominated public space is appropriate as use as a public open space having regard to:

- The size of the area of land to be used for open space, on its own or in combination with adjoining land
- Whether the open space area is located at ground level
- The type of landscaping which might be provided, including whether the land is capable of supporting a large mature canopy tree, can incorporate sustainable water supply and reuse, and moisture retention for passive cooling. The potential to accommodate a range of (organised, unstructured and informal) recreational uses
- Whether the open space area is safe and accessible, and its location having regard to a range of transport options and entry from a local street or publicly accessible laneway (24 hours)
- Whether the open space area enhances the liveability of the neighbourhood by providing visual relief from built form and noise
- Whether the open space area receives adequate levels of sunlight (a minimum of 3 hours of direct sunlight between 9am and 3pm on June 22 and at least 5 hours of direct sunlight between 9am and 3pm on September 22)
- Whether the open space area will remain useable and functional as open space with sea level rise and larger storm events
- The impact of adjoining land uses
- Whether the land, or adjoining land is contaminated
- The location of the site and open space area having regard to biodiversity, habitat corridors, and the wider open space network
- Whether the open space is restricted by services or easements including roadways, overhead structures, water and power supply, and flood mitigation and drainage infrastructure
- Whether the open space contributes to the character and attractiveness of the neighbourhood
- Whether the open space is visually prominent to maximise its use
- Whether the open space is capable of being transferred to the Council and rezoned for public open space
- Whether the open space is able to be improved, maintained and managed by Council.

[Adapted from the City of Melbourne Public Open Space Contribution Policy Melbourne Planning Scheme – Clause 22.28 Public Open Space Contributions] [Victorian Government, 2018d].
Mechanisms to deliver open space

Methods of delivering open space include:

- Via a FAR - this enables open space to be delivered on sites without compromising overall yield [see Figure 45]. This would still require Council to purchase the land, however, at a moderate price that takes into account the value that the developer retains from the land by delivering the yield on the remainder of their site as well as any open space contributions that are delivered via the standard Clause 53.01.

- Via a FAU - this enables open space to be delivered in exchange for increased yield on a site. This is an opt-in scheme and does not provide certainty that the open space will be delivered.

- Via an Infrastructure Contributions Plan - this is a new planning tool that includes the opportunity to require the provision of land in addition to cash contributions for other infrastructure items. This can also work in conjunction with a FAR.

- Via Clause 53.01 - this is already in place and will be utilised to provide open space across Moonee Valley. Sites would be acquired by Council using this funding mechanism.
Supporting commercial development
A FAR control included in MPAC will guide the application of discretion when assessing a development proposal against the height and setback controls.

A key strategic objective in the centre is to encourage employment growth and a diversity of businesses that can meet the needs of local residents and support a vibrant hub. In particular, the Employment and Floorspace Report for MPAC\textsuperscript{13} identified the need to support the delivery of larger floorplates suitable for commercial uses and opportunities to achieve this within the centre should be strongly encouraged.

Large sites
Large sites are highly suitable as mixed-use developments that incorporate uses such as supermarkets, office space, recreational facilities, hospitality and/or retail. This is because larger sites can accommodate a diversity of uses as well as the larger floorplates that many non-residential uses require. There is currently strong market pressure, however, for these sites to develop as primarily apartment developments as this is providing the highest financial return on a site. Mixed-use developments that include employment generating uses should therefore be strongly encouraged on large sites to support the economic viability and diversity of uses within the centre. At a minimum a FAR of 1:1 (within the overall allowed FAR) should be dedicated to non-residential uses to achieve this aim.

Infill sites
Infill sites are more likely to develop as apartments (with some retail or hospitality uses at ground floor) or as 100% commercial buildings.

All sites, regardless of use, are subject to the built form controls to ensure overall amenity objectives and character outcomes are met.

Delivering affordable housing
Delivering affordable housing is a complex problem that is currently being progressed through state government planning reform.

Recent initiatives that are relevant to MPAC are the inclusion of affordable housing as a defined public benefit that can be delivered by a Floor Area Uplift (FAU) in Amendment C270 (Central City Built Form Review) and the adoption of a Social Housing Uplift which is dedicated to the provision of affordable housing in Fishermans Bend. Both schemes enable the developer to receive additional yield in exchange for delivering affordable housing units that are gifted to a registered affordable housing provider.

A FAU scheme is a value-sharing mechanism which can operate alongside other development contribution frameworks (SOS Economics & Planning, 2016) including an Infrastructure Contributions Plan.

\textsuperscript{13} SOS Economics & Planning, 2019

Moonee Ponds Activity Centre Built Form Framework | Hedjey & Co
5.5 Built form strategy

The following section outlines proposed changes to built form controls to address the identified design issues and realise new opportunities to improve built form outcomes. These were developed through an iterative built form testing process – the findings can be found in the Appendix of this report.

The built form strategy is framed around the following elements:
- Building heights
- Streets
- Laneways
- Sun & wind
- Activation / pedestrianisation
- Heritage buildings

Building heights

Objective 1: Revise building heights to respond to identified issues and opportunities.

The urban design analysis of the MPAC found that there were discrete opportunities to increase building heights to achieve a more cohesive built form strategy and deliver strategic objectives on selected sites. There were also instances where it was found that the height should be reduced on constrained sites in the centre, at sensitive residential interfaces and to protect proposed open space from overshadowing.

Design response
Increase height limits in specific locations to achieve the following objectives:

- Increased intensification along Pascoe Vale Road
- Increased intensification on sites adjacent to the railway station
- Provision of greater definition to the Junction
- Allow for the provision of open space within sites
- Moderate increase in height on Puckle Street to support revitalisation of properties without compromising heritage character.

Increases in heights are focused on sites with multiple frontages (which enable high levels of amenity) and sites with existing rear vehicular access.

Decrease heights in specific locations to achieve the following objectives:

- Reduce visual impact and overshadowing impact on sensitive residential interfaces.
- Lower building heights on small sites along Everage Street where taller forms would compromise the street character and amenity.
- Remove 15-storey height controls on narrow, deep sites.

More detailed information relating to changes in building height can be found on the following pages.
Objective 2: Deliver multiple buildings on large sites that are of varying heights.

Large sites should deliver multiple buildings of varying heights. This creates more permeable sites, reduces visual bulk and allows diverse housing options to be included within single sites. For example, a site might have a 15 storey tower element and a series of three storey townhouses fronting a public space. This height variation creates relief and contrast in high density environments.

Design response
- On larger sites ensure that a diversity of building heights and scales are delivered.

Figure 46 Summary of changes to building heights to respond to identified issues and opportunities.

Moonee Ponds Activity Centre Built Form Framework | H妖 + Co
Increases in height

Height increased from 3 storeys to 4 storeys
- 1A. To allow for increased development capacity above heritage buildings with increased setbacks above the street wall.

Height increased from 4 storeys to 6 storeys
- 2A. To reinforce railway corridor and maximise density around Moonee Ponds Railway Station.
- 2B. To reinforce Pascoe Vale Road activity corridor, increase height on high amenity sites and signify arrival in Moonee Ponds Activity Centre.
- 2C. To reinforce Ascot Vale Road activity corridor, increase height on high amenity sites and signify arrival in Moonee Ponds Activity Centre.
- 2D. Opportunity to increase height adjacent to large site and in close proximity to the station (previously 6 storeys to decrease overshadowing on redundant public open space previously proposed).
- 2E. Opportunity to increase height adjacent to large site and in close proximity to the Moonee Ponds Railway Station.
- 2F. Opportunity to increase height on high amenity large sites.

Height increased from 6 storeys to 8 storeys
- 3A. To reinforce the Junction, increase height on high amenity sites and signify arrival in Moonee Ponds Activity Centre.
- 3B. To allow for the inclusion of a public open space at 541 Mount Alexander Road.

Height increased from 10 storeys to 12 storeys
- 4A. Opportunity to accommodate greater height to the north and allow for increased ground floor public space and reduced height to the south.

Height increased from 10 storeys to 15 storeys
- 5A. Opportunity to accommodate greater height to the south and allow for increased ground floor public space and reduced height to the north.

Decreases in height

Height decreased from 4 storeys to 3 storeys
- 6A. To create an adequate transition to low-scale residential.

Height decreased from 8 storeys to 6 storeys
- 7A. To create an adequate transition to low-scale residential to the south and reduce overshadowing of private open space.

Height decreased from 10 storeys to 6 storeys
- 8A. To create an adequate transition to low-scale residential to the south.
- 8B. To create an adequate transition to low-scale residential to the north.

Height decreased from 10 storeys to 8 storeys
- 9A. Reduced height on small site to the rear of Puckle Street to maintain high amenity within the street.

Height decreased from 15 storeys to 8 storeys
- 10A. Reduced heights along Everage Street to maintain high amenity within the street.
- 10B. Reduced heights on narrow, deep sites.
Figure 47 Summary of proposed changes to height limits

The benefits of each of these proposed changes is illustrated on the following pages.
Figure 48 Existing building envelope controls – View looking east from train station

Proposed Height 4 storeys
Mandatory control with no FAR
Height increased from 3 storeys to 4 storeys to allow for increased development capacity above heritage buildings with setbacks above the street wall.

Proposed Height 12 storeys
FAR 4.5:1
Increase height limit to 12 storeys to accommodate greater height to the north and allow for increased ground floor public space.

Proposed Height 6 storeys
FAR 3.5:1
Decrease height limit from 10 to 6 storeys to respond to sensitive interface to the north.

Proposed Height 6 storeys
FAR 4.1

Figure 49 Proposed building envelope controls – View looking east from train station

Moorree Ponds Activity Centre Built Form Framework | Hodgk + Co
10 storeys

10 storeys

Figure 50: Existing building envelope controls – View looking east along Gladstone St.

Proposed Height 12 storeys
FAR 4.5:1
Increase height limit to 12 storeys to accommodate greater height to the north and allow for increased ground floor public space.

Proposed Height 6 storeys
FAR 3.5:1
Height decreased from 10 storeys to 6 storeys to create an adequate transition to low-scale residencial to the south.

Figure 51: Proposed building envelope controls – View looking east along Gladstone St.

Moonee Ponds Activity Centre Built Form Framework | Hddy + Co

PAGE 324
Figure 52: Existing building envelope controls - View looking west along Dean St.

Proposed Height 6 storeys
FAR 3.5:1
Height decreased from 8 storeys to 6 storeys to create an adequate transition to low-scale residential to the south and reduce overshadowing of private open space.

Proposed Height 8 storeys
FAR 4.5:1
Height increased from 6 storeys to 8 storeys to reinforce the Junction, increase height on high amenity sites and signify arrival in Moonee Ponds Activity Centre.

Proposed Height 6 storeys
FAR 3.5:1
Height increased from 4 storeys to 6 storeys to increase height on high amenity large sites.

Figure 53: Proposed building envelope controls - View looking west along Dean St.

Moonee Ponds Activity Centre Built Form Framework | Hodgkison + Co
Figure 54 Existing building envelope controls – View looking to the Clocktower Centre

Proposed Height 6 storeys
FAR 4:1
Height increased from 4 storeys to 6 storeys to reinforce Racecourse Mills Road activity corridors, increase height on high amenity sites and dignify arrival to Moonee Ponds Activity Centre.

Figure 55 Proposed building envelope controls – View looking to the Clocktower Centre

Moonee Ponds Activity Centre Built Form Framework | Hedyce Co
Figure 56 Existing building envelope controls – View looking south from Queens Park

Proposed Height 18 storeys
FAR 3:1
Height increased from 10 storeys to 18 storeys to accommodate greater height to the south and allow for increased ground floor public space.

Proposed Height 6 storeys
FAR 3.5:1
Height decreased from 10 storeys to 6 storeys to create an adequate transition to low-scale residential to the north.

Figure 57 Proposed building envelope controls – View looking south from Queens Park

Proposed Height 6 storeys
Height increased from 4 storeys to 6 storeys to increase height adjacent to large site and in close proximity to the Moonee Ponds Railway Station.

Moonee Ponds Activity Centre Built Form Framework | Hodgkison + Co
Figure 58 Existing building envelope controls – View looking North along Mt Alexander Road

Proposed Height 8 storeys
FAR 4.5:1
Height increased from 6 storeys to 8 storeys to allow for a ground floor public space at 541 Mount Alexander Road.

Figure 59 Proposed building envelope controls – View looking North along Mt Alexander Road

Proposed Height 6 storeys
Height increased from 4 storeys to 6 storeys to reinforce Ascot Vale Road infill corridor, increase height on high amenity sites and signify arrival to Moonee Ponds Activity Centre.

Moonee Ponds Activity Centre Built Form Framework | Hedjy + Co
Streets

Objective 3: Create well-proportioned streets.
The relationship between a street wall height and the street width directly affects the experience of the pedestrian within the street. Street walls that are too high and continuous often create a canyoning effect that can make the pedestrian feel overwhelmed by the scale of the buildings. The height of the street wall also affects the amount of sunlight and daylight entering the street.

The current planning controls apply a discretionary blanket control across the MPAC of 11 metres regardless of the street width. This will create a lack of street definition for some streets (for example at the Junction). A well-proportioned street wall is not being incorporated into many developments, for example with recent approvals along Hall Street including 50 metre and 34 metre sheer walls to the street.

Design Response
• Introduce street wall heights that are responsive to the street context and relate to overall building form.

Objective 4: Encourage a diversity of heights along the street.
The street wall height should be varied, with the prescribed street wall height defining the maximum, to encourage a diversity of design responses and an articulated street frontage. The street wall height should also respond to existing heritage buildings and opportunities to improve sunlight access into adjacent streets or parks.

Design Response
• Encourage street wall height variation, with the prescribed street wall height defining the maximum, to encourage a diversity of design responses and a visually interesting street frontage.

Objective 5: Define the street wall edge by requiring upper level street setbacks.

Upper level street setbacks enable the benefits of a preferred street wall height to be realised. Street setbacks need to be of a sufficient depth to ensure there is clear delineation between the street wall and any taller building elements. The depth of the setback should vary with the height of the taller element to ensure a distinction is clear between the base building and upper storeys. Upper level street setbacks can also mitigate the downward wind impacts of taller buildings.

Design Response
• Introduce upper level street setbacks that are in proportion to the building height.

Objective 6: Define the Junction through higher street walls, active interfaces and architectural excellence.
This primary intersection is currently a negative attribute of the centre. It is heavily trafficked and poorly defined by the surrounding development. There are significant opportunities to improve the overall experience of this area through the introduction of greater development intensification that can redefine this crossroads as an important urban space. This should be paired with improvements to the public realm, including improved pedestrian crossings, to create a welcoming urban environment.

Design Response
• Introduce higher street wall heights to help define the edges of this public space.
• Ensure new development provides an active frontage to the intersections.
• Considering the prominence of these sites, require the highest levels of architectural excellence which can establish landmarks for the centre.
Laneways

Objective 7: Retain the intimate, pedestrian-friendly scale within existing laneways.

The existing laneways vary in width and orientation. They contribute to a diverse and intricate layering of spaces within the MFAC. Melbourne is well-known for its laneways which provide the opportunity to create intimate, pedestrian-friendly spaces away from busy streets and intersections.

Design Response
- Introduce a lower street wall height along laneways to ensure that these spaces are welcoming and attractive spaces.

Sun and wind

Objective 8: Ensure sunlight reaches important streets and spaces within the cooler months when people value it the most.

The accepted practice in inner urban areas of Melbourne is to provide protection for solar access at the equinox. This approach seeks to balance support for solar access with the need to support development intensification.

As more people live in higher density environments, the importance of sunlight access is heightened. People value sunlight access most in the cooler months. The recent review of built form controls in the central city introduces winter sunlight access controls (via Amendments C279 - Central City Built Form Review, and C245 - Queen Victoria Market). This demonstrates that supporting significant redevelopment while providing winter sunlight access is achievable.

A. Street wall heights (Objective 3)
B. Upper level street setbacks (Objective 5)
C. Vibrant streets through activated lower floors (Objective 5)
D. Ground level setback (on designated streets only) - (Objective 12)
E. Lower street wall to laneways (Objective 7)

Figure 60 Proposed design response to deliver high quality public realm within streets

Moonee Ponds Activity Centre Built Form Framework | HED+ 

67
While the importance of avoiding overexposure to the sun is well understood, the health impacts of insufficient sunlight exposure are not. Over 50% of Victorians are Vitamin D deficient in winter. This can have significant physical and mental health impacts. Providing people with the opportunity to lead healthy lives means providing them with the opportunities to access sunlight and shade as they need. A growing body of health research indicates that access to sunlight in winter is as important as access to shade in summer. This does not diminish the need for individuals to take responsibility for moderating exposure to UV.

**Design Responses:**
- Introduce overshadowing controls to protect winter sunlight access to existing and proposed open spaces within the MPAC and September sunlight access controls to Puckle Street which serves as the social hub of the MPAC.

**Objective 9: Mitigate the impact of wind on streets and public spaces**

Medium or high rise developments with continuous facades create canyoning in streets which creates a wind tunnelling effect. Reducing the width of buildings by delivering multiple buildings on wide sites that have 1:1 street walls and upper level setbacks will reduce wind as well as create better urban design outcomes. Promoting slender-lower elements with adequate building separation will also assist in protecting pedestrian comfort in the public realm.

**Design Response**
- Future development must be designed to avoid unsafe wind conditions and to achieve comfortable wind conditions suitable to the intended use of all adjacent public realm and private habitable outdoor areas.
- Wide sites should avoid continuous street walls by providing multiple buildings on the site broken up by through block links.

**Activation / pedestrianisation**

**Objective 10: Create activated street edges.**

To support a vibrant and safe centre, all development should provide an active street edge to all pedestrian links [as identified in the Streetscapes and Public Spaces Plan]. The lower levels of buildings (nominally levels 2-5) should provide passive surveillance of the street through the inclusion of active uses, windows and balconies.

**Design response**
- Require developments to provide active ground floors and upper levels to maximise street safety and vibrancy.

**Objective 11: Support the pedestrianisation of existing north-south streets and laneways.**

Considering the lack of open space within the centre, the north-south streets provide an opportunity to create sunny, welcoming spaces that can support community activities and social life within the streets.

**Design response**
- Prioritise active interfaces on north-south streets and laneways and avoid vehicular crossovers in order to protect these streets for future pedestrianisation.

**Objective 12: Provide ground level setbacks to the street on large sites where it is considered that the proposed built form will generate significant pedestrian foot traffic.**

Opportunities to create wider footpaths through the creation of additional public space within private land should be considered in locations where they can contribute to pedestrian movement without compromising the existing valued characteristics of the MPAC. This approach should be used carefully and should not be applied to:

- Existing fine grained streets where front setbacks will lead...
Heritage buildings

Objective 14: Retain the floorplates of heritage buildings (industrial and non-industrial) for non-residential use.

The retention of existing heritage buildings is strongly supported as it will enable people to engage with the local history of the area and support a wide range of smaller scale commercial uses. In particular, the reuse of industrial buildings for creative spaces can provide a positive contribution to the vibrancy and identity of the area.

Design response
- Redraft design objectives to provide guidance on how development should respond to heritage context at a precinct by precinct scale.
- Support the adaptive reuse of existing industrial buildings for commercial uses, including creative spaces.

5.6 Role of large sites

Large sites within the MPAC have the opportunity to have a significant contribution to realising the potential of the centre. The impact of a single development like 40 Hall Street shows how large development sites can play a key role in shifting the overall strategic direction and character of the place.

Key opportunities that should be pursued on large sites include:

- Support for commercial uses
- Provision of new public open space
- Provision of new through-block links
- Provision of affordable housing.
Outdoor dining on Pratt Street
Part C. Proposed changes to the ACZ

This chapter details the changes proposed to the Activity Centre Zone as a result of this study. A summary of these changes is illustrated in Figure 61.

These changes provide the guidance needed to facilitate the delivery of high-quality built form outcomes on every site. They also provide additional specific design objectives and strategic objectives on identified large sites.

Further work required
Additional work outside the scope of this report is also recommended for the MPAC to support the proposed level of growth. This includes consideration of transport, wind and affordable housing.

The preparation of an urban design policy is also recommended to address common design issues that occur across the municipality (which also affect the MPAC).

<table>
<thead>
<tr>
<th>EXISTING ACTIVITY CENTRE ZONE</th>
<th>PROPOSED CHANGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 MPAC FRAMEWORK PLAN</td>
<td>UPDATE 1.0 MPAC FRAMEWORK PLAN</td>
</tr>
<tr>
<td>2.0 MPAC LAND USE AND DEVELOPMENT OBJECTIVES</td>
<td>UPDATE 2.0 BUILT FORM OBJECTIVES</td>
</tr>
<tr>
<td>3.0 TABLE OF USES</td>
<td>UPDATE 4.4 DESIGN AND DEVELOPMENT PROVISIONS</td>
</tr>
<tr>
<td>4.0 CENTRE WIDE PROVISIONS</td>
<td>UPDATE 5.1 MAPS</td>
</tr>
<tr>
<td>5.0 PRECINCT PROVISIONS</td>
<td>UPDATE 5.2 OBJECTIVES</td>
</tr>
<tr>
<td>5.1 PRECINCT MAPS</td>
<td>DELETE</td>
</tr>
<tr>
<td>5.2 PRECINCT OBJECTIVES</td>
<td>DELETE</td>
</tr>
<tr>
<td>5.3 PRECINCT REQUIREMENTS</td>
<td>INTRODUCE SPECIFIC SITE GUIDELINES FOR LARGE SITES</td>
</tr>
<tr>
<td>5.4 PRECINCT GUIDELINES</td>
<td>DELETE</td>
</tr>
<tr>
<td>SITE SPECIFIC GUIDELINES</td>
<td>DELETE</td>
</tr>
</tbody>
</table>

Figure 61 Summary of recommended updates to the Moonee Ponds Activity Centre Zone.
6. Proposed development controls - MPAC area

The following detailed recommendations are structured (and numbered) in the same format as the existing Activity Centre Zone to provide explicit and detailed guidance on the proposed updates to the existing schedule.

Schedule Section 1.0

Moonee Ponds Framework Plan

An updated Framework Plan is required. The proposed map that would replace the existing Moonee Ponds Framework Plan in the current Activity Centre Zone is illustrated in Figure 62. The key changes from the existing map are:

- Minor change in the MPAC boundary to remove the three properties fronting Thomas Street.
- Reduction in the extent of Precinct 1 boundary to exclude properties on the west side of Mt Alexander Road. There was no evident reason why this site was included in Precinct 1: Civic and Community. Those sites are now proposed for inclusion in Precinct 2: Hall and Homer.
- Removal of landmark buildings from the map. Proposed landmark buildings are to be included in Schedule Sub-Clause 5.0 Precinct Provisions.
- Inclusion of identified large sites on the map. The current policy includes site specific objectives however these are not currently mapped.

Schedule Section 2.0

Land use and development objectives to be achieved: Built form

The existing built form objectives for the Moonee Ponds Activity Centre are listed in (see Table 9). Revised objectives are needed to reflect the findings and recommendations of this report, including the need for additional objectives relating to heritage, street frontages and street wall height. Recommended new objectives are listed in Table 10.

Existing objectives

To design new built form that:

- Provides for taller development forms to occur in the central areas of the Moonee Ponds AC, progressing along Mount Alexander Road to within the junction.
- On larger sites, articulates the building’s overall volume to present as a number of distinct elements.
- At the periphery of the Moonee Ponds AC, provides heights and setbacks that provide a transition to the scale of residential areas.
- Interacts well with the public realm, providing a positive experience at the street level for all users, including mitigating for overheating and wind impacts.

Table 9 Existing 2.0 Land Use and Development Objectives: Built Form in the MPAC Activity Centre Zone Schedule

Proposed objectives

To deliver a mixed-use precinct with a range of built form typologies including low, medium and high-rise development. Hybrid developments to be located within Precinct 2 and 3 with taller forms located away from sensitive residential interfaces.

To deliver strategic objectives and specific built form outcomes on identified large sites including the provision of public open space, affordable housing, through-block links and commercial floorspace.

To create a transition in scale and typology at sensitive residential Interfaces by providing ground floor setbacks and tower street wall heights.

To contribute to a comfortable public realm by designing buildings to minimise overshadowing and wind impacts through street wall heights and tower separation.

To provide a sensitive design response to heritage buildings, be whether on the site or on adjacent sites that does not overwhelm the existing heritage buildings.

To provide street frontages that contribute to an active public realm and minimise the impact of servicing by locating it on adjacent service lane ways or new on-site service lane ways.

To create human-scale streets by ensuring street wall heights respond to contextual factors including street widths, residential interfaces and heritage context.

To provide a continuous street wall edge (avoid undercroft spaces) and create well-defined streets within the activity centre.

Table 10 Proposed 2.0 Land Use and Development Objectives: Built Form in the MPAC Activity Centre Zone Schedule
Figure 62 Proposed map for inclusion in the ACZ + Moeonee Ponds Framework Plan [1.0]

Moeonee Ponds Activity Centre Built Form Framework | Hord + Co
Schedule Sub-Section 4.4
Design and development

The centre-wide provisions currently outline design and development outcomes for building setbacks and podium heights and building height. It is this section of the AG2 which needs the most significant revision to provide sufficient guidance on what are considered acceptable built form outcomes in the MPAC. The following sections are proposed with detailed recommendations provided for each:

- Building heights and Floor Area Ratios
- Building setbacks and street wall heights
- Residential Interfaces - ground floor street setbacks
- Solar access
- Building separation
- Large sites
- Social Housing Uplift

Building heights and Floor Area Ratios
The current building height controls are incorporated into the precinct provisions together with high-level guidelines on built form outcomes. The following changes are proposed:
- Specify preferred (discretionary) building heights in Sub-section 4.4: Design and development to demonstrate the cohesive built form strategy for the MPAC.
- Introduce a mandatory Floor Area Ratio for residential and mixed-use developments to ensure sites are not overdeveloped and support flexible site-specific design outcomes. These have been determined through built form testing by Hodyl+Co (see Appendix A) and FK Architects.
- Introduce a Floor Area Uplift mechanism to deliver affordable housing. This should be capped at 0.5:1.
- Introduce a policy requirement on large sites that a minimum of 1:1 FAR (within the overall FAR) should be dedicated to employment generating uses.
- Increase building heights along the railway line, Holmes Road, Puckle Street, Young Street [south side], Mount Alexander Road, Peacock Vale Road and McPherson Street.
- Increase heights on the Taylor Street [south side], Hall Street [south side], Young Street [north side], Gladstone Street [north side] and Dean Street [north side].

A detailed summary of changes to height limits is included on page 50.

Existing provisions
New development must not exceed a mandatory maximum building height specified in the precinct provisions at Clause 5 of this Schedule.

A permit cannot be granted or amended to vary a mandatory maximum building height specified in the precinct provisions at Clause 5 of this Schedule.

For the purposes of this schedule, the mandatory maximum building height does not apply to service equipment including plant rooms, lift overruns, solar collectors and other such equipment provided the following criteria are met:
- No more than 50 per cent of the roof area is occupied by the equipment.
- The equipment is located in a position on the roof so as to minimise overshadowing of neighbouring properties and public spaces.
- The equipment does not extend higher than 3.6 metres above the mandatory maximum building height as specified in the precinct provisions at Clause 5 of this Schedule.
- The equipment is designed and screened to the satisfaction of the responsible authority.

<table>
<thead>
<tr>
<th>Table 11</th>
<th>Existing design and development provisions related to building height (Schedule Sub-section 4.4)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proposed provisions</strong></td>
<td></td>
</tr>
<tr>
<td>Development should not exceed the discretionary building heights specified in Figure 64.</td>
<td></td>
</tr>
<tr>
<td>Development must not exceed the mandatory maximum building heights as specified in Figure 64.</td>
<td></td>
</tr>
<tr>
<td>Development must not exceed the FARs specified in Figure 64, except:</td>
<td></td>
</tr>
<tr>
<td>- when a Social Housing Uplift is agreed.</td>
<td></td>
</tr>
</tbody>
</table>

- Large sites should include a minimum amount of employment generating uses equivalent to 1:1 FAR within the overall allowable FAR.

For the purposes of this schedule, the discretionary maximum building height does not apply to service equipment including plant rooms, lift overruns, solar collectors and other such equipment provided the following criteria are met:
- As per existing criteria noted above.
- For sites on which two height limits and two FARs apply, the lower height and FAR should be adopted to a depth of 30m from the street boundary on which the lower applies.

<table>
<thead>
<tr>
<th>Table 12</th>
<th>Proposed design and development provisions related to building height (Schedule Sub-section 4.4)</th>
</tr>
</thead>
</table>

Hooeene Ponds Activity Centre Built Form Framework | Hodyl + Co
Figure 63 Existing building heights (map of building heights currently not included in 4.4 Centre-wide provisions: Design and development)

Figure 64 Proposed building heights and FARs (to be included in 4.4 Centre-wide provisions: Design and development)

Note: Proposed building heights are expressed in metres as well as storeys to communicate to a wider audience the preferred building heights.

* Assumes a ground floor height of 4m and upper levels of 3.3m rounded up to the nearest whole number. These floor to floor heights allow for adaptable ground floors and generous ceiling heights at upper levels.

** Assumes 4m floor to floor heights to support 100% commercial uses.
Schedule Sub-Section 4.4: Design and development (cont.)

Building setbacks and street wall heights

The existing building setback and podium height provisions include a standard street wall height of 11 metres (that applies across the centre) with a setback above this height (no measurement specified). There are no side and rear setbacks currently defined.

The lack of appropriate guidance on street wall heights and setbacks has led to many of the existing built form issues that have been identified in this study.

The following changes to the AGZ are recommended:

- Introduce discretionary street wall heights that relate to existing street widths and other contextual factors such as sensitive residential interfaces and heritage buildings.
- Specify discretionary setbacks above the street wall height that relate to overall building height.
- Remove references to ‘podiums’ which implies incorrectly that a podium and tower typology is the generally preferred built form outcome.

### Table 13 Summary of changes to design and development provisions in relation to building setbacks and podium heights (4.4)

<table>
<thead>
<tr>
<th>Building height/ type</th>
<th>Setback above the street wall height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 20m</td>
<td>Minimum 5m setback above street wall height.</td>
</tr>
<tr>
<td>Up to and including 20m</td>
<td>Minimum 5m setback above street wall height.</td>
</tr>
<tr>
<td>Heritage buildings</td>
<td>Should be determined on a site by site basis with consideration of the predominant streetscape character and specific building attributes.</td>
</tr>
<tr>
<td>Corner sites</td>
<td>The higher of the two street wall heights applies on corner sites, transitioning to the lower street wall height within the development.</td>
</tr>
</tbody>
</table>

Revised to: Street wall heights and setbacks above the street wall height

Existing provisions

- Unless otherwise specified in Clause 5 of this Schedule or located at a Residential Front Interface, all buildings should provide a zero metre front setback from the street for the first 11 metres in height from ground floor level to provide a podium and activate the streetscape.

Revised provisions

- Maximum street wall heights should be in accordance with Figure 66, unless the street wall height specified is higher than the building height, in which case the building height should be adapted as the maximum street wall height.

- Unless otherwise specified in subsection 4.4, all buildings should provide a zero metre front setback from the street to the height of the street wall.

- Built form above 11 metres in height should be set back from the street to avoid overshadowing and detrimental wind effects on public spaces.

- Built form above the street wall should be setback as specified in Table 14 to create a visual distinction between the lower and the upper levels and minimize the impact of overshadowing and wind on the public realm.

### Table 14 Summary of changes in relation to upper level street setbacks

<table>
<thead>
<tr>
<th>Building height/ type</th>
<th>Setback above the street wall height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 20m</td>
<td>Minimum 5m setback above street wall height.</td>
</tr>
<tr>
<td>Up to and including 20m</td>
<td>Minimum 5m setback above street wall height.</td>
</tr>
<tr>
<td>Heritage buildings</td>
<td>Should be determined on a site by site basis with consideration of the predominant streetscape character and specific building attributes.</td>
</tr>
<tr>
<td>Corner sites</td>
<td>The higher of the two street wall heights applies on corner sites, transitioning to the lower street wall height within the development.</td>
</tr>
</tbody>
</table>

Hume City Council
Wodonga Planning Scheme
Schedule 12.15

Moeenee Ponds Activity Centre Built Form Framework | Hodgkison Disability Services
Figure 65 Existing street wall heights (map of street wall heights currently not included in ACZ).

Figure 66 Proposed maximum street wall heights (map of street wall heights to be included in 4.4 Centre-wide provisions: Design and development).

Mooonee Ponds Activity Centre Built Form Framework | Hodgkison + Co
Schedule Sub-Section 4.4: Design and development (cont.)

Residential Interfaces - Ground floor street setbacks

The existing Residential interface policy is included on a precinct by precinct basis under 5.0 Precinct provisions. The interfaces are categorised into three types (see Table 16). The following changes to the policy are recommended:

- Consolidate Residential Interface provisions into one map to be included in 4.0 Centre-wide provisions rather than distributed across precincts under 5.0 Precinct provisions.
- Consolidate Residential Front Interfaces - Type 1 and Type 2 into one redrafted policy requirement.
- Simplify policy requirements by consolidating, separating solar requirements and introducing measurables.
- Remove Residential Front Interfaces from corner sites.
- Introduce a separate solar access policy that sits separately to the Residential Front Interface policy requirements in 4.0 Centre-wide provisions (see Solar access, p.80).

<table>
<thead>
<tr>
<th>Interface type</th>
<th>Existing policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Front Interface - Type 1</td>
<td>Properties designated Residential Front Interface - Type 1 on the precinct map should provide front setbacks in accordance with Standard B4 of Clause 55.03-1.</td>
</tr>
</tbody>
</table>
| Residential Front Interface - Type 2 | Properties designated Residential Front Interface - Type 2 on the precinct map should provide sensitive interfaces to the residential properties to the north through the provision of ground level setbacks containing landscaping which softens the built form. Properties designated Residential Front Interface - Type 2 on the precinct map should provide sensitive interfaces to the residential properties to the south through:  
  - The provision of ground level setbacks containing landscaping which softens the built form.  
  - The provision of upper level setbacks to ensure solar access to the southern footpath at the equinox. |
| Residential Rear Interface | In Sub-precinct 5B, for properties south of Holmes Road, the standards of Clause 55.04-1 (side and rear setback) and Clause 55.04-5 (overhanging open space) should be met.  
  In Sub-precincts 7B or 7F, for properties which directly abut a residential zone to the side or rear, or a laneway less than five metres wide, the Standards of Clause 55.04-1 (side and rear setback) should be met from the subject boundary.  
  In Sub-precinct 8A, for properties which directly abut a residential zone to the side or rear, the standards of Clause 55.04-1 (side and rear setback) should be met. |

Table 16: Summary of proposed design and development provisions in relation to Residential Interfaces

<table>
<thead>
<tr>
<th>Interface type</th>
<th>Proposed policy</th>
</tr>
</thead>
</table>
| Residential Front Interface | To provide sensitive interfaces to low-scale residential uses by: Providing a minimum 3m ground floor landscaped setback.  
  *Solar access controls have been included as a separate policy requirement. |
| Residential Rear Interface 1 | To provide sensitive interfaces to low-scale residential uses by adhering to the standards of Clause 55.04-1 (side and rear setbacks). |
| Residential Rear Interface 2 | To provide sensitive interfaces to low-scale residential uses by: Reducing the street wall to 8m at the rear.  
  *Solar access controls have been included as a separate policy requirement. |
| Residential Side Interface | To provide sensitive interfaces to low-scale residential uses by: Providing a 3m through-block link and reducing the street wall to 8m at the side interface. |

Table 18: Summary of existing design and development provisions in relation to Residential Interfaces (currently in ACE Section 8.0)
Figure 67: Existing Residential Interface built form controls (Image of Residential Interfaces currently included at a precinct scale under 9.0 Precinct Provisional)

Figure 68: Proposed Residential Interface built form controls (Maps of Residential Interfaces to be included at a precinct scale under 4.0 Centre-wide Provisional)

Mooonee Ponds Activity Centre Built Form Framework | Hodgkison Partners

TUESDAY, 10 DECEMBER 2019
ATTACHMENTS – ORDINARY COUNCIL MEETING
ITEM 10.5 - ATTACHMENT B
Schedule Sub-Section 4.4: Design and development (cont.)

Solar access

The City of Moonee Valley has completed a Streetscapes and Public Space Plan which identifies important existing and potential public spaces and streets within the centre. The amenity of these public spaces needs to be protected. The following changes to the policy are recommended:

- Introduce a consolidated solar access policy that protects key streets and future open spaces as identified in the Streetscapes and Public Space Plan.
- Introduce a performance measure to ensure that solar access is considered in a clear and equitable manner.
- Retain overshadowing protection controls to adjacent residential properties.

<table>
<thead>
<tr>
<th>Existing solar controls</th>
<th>Proposed solar controls</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5.1-4 Precinct guidelines</strong></td>
<td>Ensure solar access into the transport interchange and proposed new town square.</td>
</tr>
<tr>
<td></td>
<td>Enable taller built form in the north of the precinct, complementary to the scale of adjacent heritage buildings, in a manner that minimises overshadowing of important civic spaces.</td>
</tr>
<tr>
<td><strong>5.2-4 Precinct guidelines</strong></td>
<td>Upper level setbacks should be provided on properties along the north side of Hall Street to ensure solar access to the southern footpath at the interface.</td>
</tr>
<tr>
<td><strong>5.3-4 Precinct guidelines</strong></td>
<td>Properties designated Residential Front Interface – Type 2 on the precinct map should provide sensitive interfaces to the residential properties to the south through:</td>
</tr>
<tr>
<td></td>
<td>- The provision of ground level setbacks containing landscaping which softens the built form.</td>
</tr>
<tr>
<td></td>
<td>- The provision of upper level setbacks to ensure solar access to the southern footpath at the interfaces (Gladden Street/Dean Street/Montgomery Street).</td>
</tr>
<tr>
<td><strong>5.5-3 Precinct requirements</strong></td>
<td>In Sub-precinct 51B, for properties south of Holmes Road, the standards of Clause 55.06-1 (side and rear setbacks) and Clause 55.04-5 (overshadowing open space) should be met.</td>
</tr>
</tbody>
</table>

Table 17 Existing references to solar access in the built form controls

Table 18 Proposed solar access controls
Schedule Sub-Section 4.4: Design and development (cont.)

Building separation
There are currently no building separation controls included in the ACZ schedule. This has resulted in significant internal and public amenity issues within recent developments. As a general principle, buildings should be designed to secure their amenity from street frontages and rear boundaries, not side boundaries. Building on the side boundary up to 8 storeys or the preferred height limit (whichever is lesser) is therefore strongly encouraged. The following recommendations are made:

- Introduce side and rear setback provisions above the street wall height that relate to overall building height for buildings higher than 20m.
- Introduce side and rear setback provisions below the street wall to ensure minimum internal amenity, including:
  - ground floor rear setbacks on sites with adjacent rear side boundaries. This is to ensure that buildings are adequately separated to the rear;
  - minimum side setbacks if buildings are not built to the side boundary.
- Within sites, the minimum building separation distances between buildings are calculated as double the minimum boundary setback distance for the relevant building height.
- All setback and building separation provisions are discretionary, except rear to rear boundary conditions as illustrated in Figure 71.

<table>
<thead>
<tr>
<th>Building height</th>
<th>Side and rear setbacks above street wall height</th>
<th>Building setback below the street wall required from rear and side boundary if buildings are not built on the boundary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 27m</td>
<td>10m</td>
<td>6m</td>
</tr>
<tr>
<td>6m and up to and including 27m</td>
<td>6m</td>
<td>6m</td>
</tr>
<tr>
<td>4.5m and up to and including 21m</td>
<td>4.5m</td>
<td>4.5m</td>
</tr>
</tbody>
</table>

Table 19 Proposed building separation requirements to be included in 4.4 Centre-wide provisions: Design and development

![Diagram showing setback requirements in rear to rear boundary locations.](image)

Figure 71 Building setback requirements in rear to rear boundary locations.

Moonee Ponds Activity Centre Built Form Framework | Hodgkison & Co
Large sites
There are currently no large sites formally identified in the policies but there are a series of site specific objectives identified under 5.0 Precinct provisions under the precinct guidelines. The following changes are recommended:

- Introduce specific built form controls for large sites that support high quality hybrid developments including building separation controls.

<table>
<thead>
<tr>
<th>Building height</th>
<th>Building separation within sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to and including 20m</td>
<td>9m</td>
</tr>
<tr>
<td>Above 20m and up to and including 27m</td>
<td>12m</td>
</tr>
<tr>
<td>Above 27m</td>
<td>28m</td>
</tr>
</tbody>
</table>

Table 20 Proposed built form requirements to apply to large sites – to be included in 4.0 Centre-wide provisions: Design and development.

Figure 72 Proposed large sites to be included as a reference in the policy.
7. Proposed development controls - Individual precincts

Schedule Section 5.0
Precinct provisions

The existing Precinct provisions include Precinct maps, Precinct objectives, Precinct requirements and Precinct guidelines. The following is a summary of each sub-category and the proposed changes.

Existing precinct maps
These maps include sub-precincts that relate to the building heights outlined in precinct requirements and to sub-precinct specific guidelines. Precinct maps will no longer be included in precinct provisions that will be consolidated and moved into 4.0 Centre-wide provisions.

Precinct requirements
These will no longer be required as these are addressed in 4.0 Centre-wide provisions.

Precinct guidelines
These will no longer be required as they will be replaced with Sito specific objectives for identified large sites within the MPAC.

The following pages include the proposed changes to the Precinct objectives and the additional site specific guidelines. The changes outlined are focused on built form outcomes only. This report assumes that the existing objectives that relate to land use remain.

Precinct objectives
Revised built form objectives are proposed to better articulate the preferred built form outcomes.

Figure 73 Proposed precinct boundaries and identified large sites
Precinct 1 Civic and Community

The Civic and Community Precinct is bounded by Mt Alexander Road, Killaway Avenue and Pascoe Vale Road. The precinct has high heritage value and has no residential uses. There is a large site located at the intersection of Pascoe Vale Road and Killaway Avenue. It includes the following civic and community services:

- The Clocktower Centre (performing arts)
- A kindergarten
- Moonee Ponds Police Station
- Sam Merrifield Library
- Essendon Historical Society
- City of Moonee Valley Council Offices
- Killaway Avenue Neighbourhood Centre
- Moonee Ponds Magistrates Court

Built form objectives

- To contribute to the civic and community role of the precinct
- To minimise the extent of servicing on street frontages
- To contribute to the character of the precinct by designing buildings that are ‘set in the landscape’ with opportunities for deep soil planting
- To connect the existing laneway to the east of Pascoe Vale Road

Site specific objectives (1A)

- To provide an urban design framework that identifies opportunities to enhance the role of the site within the precinct
- To deliver an east–west laneway [see Figure 74] to improve pedestrian access to Moonee Ponds Central and provide separation from the heritage site to the south
- To provide a highly active interface to Mt Alexander Road, Killaway Avenue and Pascoe Vale Road and provide off-street servicing
- To respect adjacent heritage buildings by locating mass away from sensitive interfaces

Figure 74 Precinct 1: Civic and Community (not to scale)
Precinct 2 Hall and Homer

The Hall and Homer Precinct is bounded by Margaret Street, Taylor Street, Mt Alexander Road and Puckle Lane. There is a row of single storey terraces along Margaret Street and Puckle Lane has high heritage value with views to the rear to many of the intact heritage buildings along Puckle Street. It has sensitive residential interfaces along Margaret Street and Taylor Street. Hall Street is the central street of the precinct with a concentration of retail uses.

There is a significant mixed use development occurring at 46 Hall Street which will deliver a new public open space and a north-south through block link. There are two further large sites in the precinct with the capacity to deliver community benefit. It includes the following significant land uses:

- Moonee Ponds Central
- Kangan Institute
- ALDI Supermarket
- Coles Supermarket
- Australian Electoral Commission

Built form objectives

- To deliver medium density mixed use developments that avoid primary outlook to adjacent properties
- To reinforce Hall Street as a human scale active street by delivering small scale tenancies (nominally 5m maximum width) set within a well-designed podium
- To minimise crossovers on north-south streets and laneways to ensure pedestrians and street planting are prioritised

Site specific objectives 2A/2B/2C

- To design a hybrid model of development that includes a mixture of medium-scale development with carefully located towers
- To provide a sensitive interface to Taylor Street by locating medium-scale development at the north of the site (maximum 6 storeys) and providing a ground floor landscaped setback (minimum 3m)
- To deliver north-south laneways with active frontages and pedestrian priority
- To provide ground floor public open space at northern interface (2A: north-east) that complies with the 'public open space design requirements'
- To provide ground floor setbacks (minimum 2m) on Hall Street and Homer Street to support increased pedestrian
- To ensure tower forms are slender and minimise overshadowing and visual bulk capacity

Figure 76 Precinct 2-Hall and Homer (not to scale)
Precinct 3 Young

The Young Precinct is bound by Gladstone Street, an unnamed laneway, St Ailens Lane, Penny Lane and Ascot Vale Road. There are four low-scale heritage buildings located on Young Street, the narrow street (110m) that runs east-west through the centre of the precinct. The precinct has a mixture of large allotments and small allotments. There are two large lots in the precinct to deliver community benefit. The precinct includes a large commercial office (Australian Taxation Office) and a Woolworths Supermarket.

Built form objectives

- To deliver medium density mixed use developments that avoid primary outlook to adjacent properties
- To reference heritage materials such as brick and bluestone in new developments fronting St Ailens Lane and Penny Lane
- To provide active interfaces onto St Ailens Lane and Penny Lane and minimise the impact of servicing
- To minimise crossovers on north-south streets and laneways to ensure pedestrians and street planting are prioritised

Site specific objectives (3A)

- To design a hybrid model of development that includes a mixture of medium-scale development with carefully located towers and ground floor public open space
- To provide a sensitive interface to Gladstone Street by locating medium-scale development at the south of the site (22m) and providing a ground floor landscaped setback (minimum 3m)
- To extend Pratt Street to the south to Gladstone Street and deliver small scale tenancies (nominally 5m maximum width) along its frontage set within a well-designed podium.
- To ensure tower forms are slender and minimise overshadowing and visual bulk
- To deliver a public open space at the intersection of Pratt Street and Young Street that complies with the ‘public open space design requirements’
- To provide a ground floor setback along Young Street to accommodate increased pedestrian capacity

Site specific objectives (3B)

- To provide a sensitive interface to Gladstone Street by locating medium-scale development at the south of the site (22m) and providing a ground floor landscaped setback (minimum 3m)
- To provide a ground floor setback along Young Street to accommodate increased pedestrian capacity

Figure 24 Precinct 3 Young (not to scale)

Legend:
- Activity Centre Zone boundary
- East and Pratt Street to Gladstone Street
- Heritage overlay
- Large development sites
- Existing lane ways
- Proposed open space
- Potential public space on large development site
- Footpath widening
Precinct 6 Puckle Retail Core

The Puckle Retail Core Precinct is centred around Puckle Street. As the traditional retail centre of Moonee Ponds, the precinct has an important civic role. The street has a fine-grain subdivision pattern and supports many small retailers. It includes the following retail and civic services:

- Moonee Ponds Central
- Australia Post
- Commonwealth Bank

With the exception of five properties, all of the buildings are included in a heritage overlay. Sites on Puckle Street currently have no crossovers with vehicle access secured from rear access laneways (St Ailreans Lane and Puckle Lane). These lanes have high heritage value with rear views of the primarily intact heritage buildings along Puckle Street.

There are no identified large sites in the precinct.

Built form objectives

- To deliver low-medium scale mixed use developments that avoid primary outlook to adjacent properties
- To encourage party-walling to ensure that the fine-grain character of Puckle Street is retained (side setbacks can inadvertently encourage consolidation)
- To improve the valued heritage character and amenity of Puckle Street by designing buildings that respond to the heritage character, provide adequate setbacks above heritage buildings, small scale tenancies and awnings
- To ensure that buildings are designed in the round with consideration of how they are viewed when approaching Puckle Street
- To reinforce Puckle Street as a human scale active street by delivering small scale tenancies (nominally 5m maximum width)

Figure 77 Precinct 6: Puckle (not to scale)
Precinct 5 Holmes

The Holmes Precinct is bound by Sydenham Street, Norwood Crescent and Holmes Road. It is separated from the core of the MPAC by the railway line. It is an irregular shaped block with a mix of site sizes and types. Many of these sites are constrained by having three interfaces with private property. Approximately half of the precinct is covered by a heritage overlay, primarily concentrated along Holmes Road. The precinct has a mix of retail, commercial and residential use including low-scale detached houses. It includes the following uses:

- Small-scale supermarket
- Pharmacy
- Medical clinic
- At-grade car parking
- Hearing clinic

The precinct is bordered by sensitive residential interfaces to the north, west and south. The eastern interface is with the railway line. There are no identified large sites in the precinct.

Built form objectives

- To deliver a low-mid-scale precinct with increased heights along the railway line and adequate separation between buildings including rear setbacks
- To avoid primary outlook to adjacent properties
- To provide a transition between low and mid-rise buildings by providing ground floor landscaped setbacks at sensitive residential interfaces
- To reinforce Holmes Road as a primary street by delivering ground floor active uses
- To encourage party-walling to ensure that the fine-grain character of Holmes Road is retained (side setbacks can inadvertently encourage consolidation)
Precinct 6 Shuter

The Shuter Precinct bound by Gladstone Street, Moore Street and two unnamed laneways. It is an irregular shaped block with a fine-grain subdivision pattern. The precinct has a civic function and includes the following land uses:

- Recreational facilities
- Education centre
- Medical centre
- Childcare centre
- Australia Post

The sites to the west of Shuter Street are constrained by having three private interfaces. Recent development in the precinct has led to significant lot consolidation and several low-scale detached dwellings have been redeveloped into multi-storey developments. Multiple medium density developments are in the pipeline. There are no identified large sites in the precinct.

Built form objectives

- To deliver a mid-rise scale precinct with adequate separation between buildings including ground floor rear setbacks
- To avoid primary outlook to adjacent properties
- To provide a transition between low and mid-rise buildings by providing ground floor landscaped setbacks at sensitive residential interfaces
- To deliver ground level active uses along Shuter Street to contribute to its role as a primary active street with pedestrian priority
- To deliver ground floor active uses around Shuter Street park and contribute to safety by maximising opportunities for overlooking

![Image of Precinct 6 Shuter layout](image.png)
Precinct 7 Junction South

The Junction South Precinct centres around Mt Alexander Road and the east interface of Pascoe Vale Road. Mount Alexander Road is a primary retail frontage, with traditional shopfronts with awnings and a fine-grain subdivision pattern. Pascoe Vale Road has a mixture of commercial and residential uses. There are tramlines on both Pascoe Vale Road and Ascot Vale Road. It includes a mixture of retailers and entertainment uses such as restaurants, clubs, pubs and bars.

The sites to the east of Mount Alexander Road have rear access via Hinkles Street. Many of the sites to the west of Mount Alexander Road are constrained by having three private interfaces. There is one large site in the precinct.

Built form objectives

- To deliver a mid-rise scale precinct with heights increasing around the junction
- To encourage party-walling to ensure that the fine-grain character of Mount Alexander Road is retained (side setbacks can inadvertently encourage consolidation)
- To avoid primary outlook to adjacent properties and instead secure outlook to the street and to the rear
- To provide a continuous active street wall by providing servicing via rear lanes and streets
- To provide a transition between low and mid-rise buildings by providing ground floor landscaped setbacks to sensitive residential interfaces

Site specific objectives (7A)

- To deliver publicly accessible ground floor open space that complies with the ‘public open space design requirements’
Precinct 8 Dean Street

The Dean Street precinct is bound by Pascoe Vale Road, an unnamed laneway, Coats Street, McPherson Street and Dean Street. It has a mixture of land uses and allotment sizes and centres around Alexandra Avenue. The blocks are a regular shape and the majority have rear service lanes.

To the east of the precinct is Moonee Valley Racecourse, a site approved for a major mixed use development. This development will have a significant impact on the character of the precinct which is predominantly low-scale residential with a few large commercial offices. In the future, Alexandra Avenue will have significant foot traffic as the central street of the precinct. There are four large sites in the precinct.

Built form objectives

- To deliver a low-mid-rise precinct with heights that provide an appropriate response to sensitive residential interfaces
- To avoid primary outlook to adjacent properties and instead secure outlook to the street and to the rear
- To provide servicing requirements via rear lanes
- To deliver ground level active uses along Alexandra Avenue to contribute to its role as a primary active street that connects the precinct to central Moonee Ponds
- To deliver ground level active uses along Pascoe Vale Road to contribute to its role as a primary active street
- To provide a transition between low and mid-rise buildings by providing ground floor landscaped setbacks to sensitive residential interfaces
- To reinstate existing laneways if sites are redeveloped
- To minimise overshadowing to future open space and private backyards

Site specific objectives (8A/8B/8C/8D)

- To provide north-south through block links to improve pedestrian permeability and break up massing on large sites
- To widen rear laneways and ensure servicing is located away from street frontages
8. MPAC before and after

The overall capacity that can be delivered through the new controls is 801,376m². This is more than double the total projected demand for commercial and residential floor area to 2040 of 391,750m².

The proposed development controls therefore balance the multiple objectives that have been considered through this review:

- Supporting the role of MPAC as a Major Activity Centre by providing significant capacity for growth.
- Providing a considered and tailored response to the existing character and urban structure of the centre.
- Exceeding the projected floor area requirements to 2040.
- Enhancing the positive urban design attributes identified such as the laneways and heritage character, and addressing the existing challenges and emerging issues such as declining internal amenity and development equity.
- Ensuring the scale of development at the fringe of the MPAC responds to adjacent sensitive residential uses.

<table>
<thead>
<tr>
<th></th>
<th>Projected demand to 2040</th>
<th>Existing controls – Potential capacity (90-95% of built form envelope)</th>
<th>Proposed controls</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(Residential and commercial, refer to section 2.3)</td>
<td>801,376m²</td>
</tr>
<tr>
<td></td>
<td></td>
<td>391,750m²</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>553,641m² – 830,461m²</td>
<td></td>
</tr>
</tbody>
</table>

Table 21 Summary of development demand and potential capacity in the MPAC.
Figure 53 Illustration of potential development outcomes in the MPAC delivered by proposed built form controls. Large sites illustrate the application of the FAR and envelope controls whereas infill sites illustrate the envelope controls only.
References

ID Consulting, 2018

Moonee Valley City Council, 2019

Moonee Valley City Council, 2018
The Streetscape and Public Space Plan (Draft) – not available online

ID Consulting, 2018a

SGS Economics & Planning, 2016
Central City Built Form Review – Economic Issues, Melbourne.

SGS Economics and Planning, 2019
Moonee Ponds Activity Centre: Employment and Floor Space, prepared for Moonee Valley City Council.

Victorian Government, 2018

Victorian Government, 2018

Victorian Government, 2018a

Victorian Government, 2018b

Victorian Government, 2018c

Moonee Ponds Activity Centre Built Form Framework | Hodgkison & Partners 2018
Existing bluestone laneways
Appendix A

Built form testing
The proposed controls were tested across a range of
development sites. This included testing of the current
development controls and the proposed changes to the built
form envelope to deliver urban design objectives. The
majority of sites chosen include some complexity to ensure
that the proposed controls are able to deliver excellent design
outcomes on the most challenging sites in the Moonee Ponds
Activity Centre. One of the tested sites has an approved
development (40 Hall Street) and one has a current (as of
early 2019) development application (17 Puckle Street).

The parameters adopted for each site have been drawn from
accepted urban design principles and recently approved or
proposed built form controls introduced in Melbourne’s central
city growth areas.

The following sites were tested:

1. 13 Fruit Street (Woolworths Site)
2. 18 Homer Street (Coles Supermarket)
3. 40 Hall Street
4. 14 Hall Street (ALDI Supermarket)
5. 740 Mount Alexander Road
6. 109 Puckle Street
7. 541 Mount Alexander Road
8. 17 Puckle Street (Cinema Redevelopment)
9. 3 Sydenham Street
10. 615 Mount Alexander Road
11. 23-29 Dean Street

Figure B4 Eleven sites in the MPAC selected for individual testing.
1. Woolworths site - 13 Pratt St

This site is a large (13,931 square metres) and complex site located to the south of the Moonee Ponds Activity Centre. The site currently accommodates the Woolworths supermarket and large carpark. There is an opportunity to provide much needed public open space within the site and additional north-south links to increase the pedestrian permeability of the centre. The southern interface of the site fronts Gladstone Street, a sensitive residential interface with predominantly single storey detached dwellings.

Summary of design decisions

- North-south pedestrian laneways to increase permeability and create new vibrant streets
- East-west service laneways to minimise servicing requirements on existing streets and proposed pedestrian laneways allowing for pedestrian access
- 300 square metres of ground floor private open space provided
- 850 square metres of public open space provided
- 1:1 street wall heights to respond to the proportion of surrounding streets
- Ground floor setbacks to Gladstone Street to assist in the transition to low-scale residential
- Solar protection for the backyards of houses located on the south-side of Gladstone Street
- Multiple buildings with a diversity of heights across the site and variable street wall heights that are responsive to context
- Tower elements are setback from the street and located away from sensitive interfaces
- Tower elements are slim to allow for high internal amenity, views of the sky between tower forms from the street and reduce visual bulk

Figure 85 3D model of 13 Pratt Street

<table>
<thead>
<tr>
<th>Test parameters</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Building Height</td>
<td>10 storeys</td>
</tr>
<tr>
<td>Street wall height</td>
<td>1:1</td>
</tr>
<tr>
<td>Street setbacks above street wall height</td>
<td>5m setback above street wall height</td>
</tr>
<tr>
<td>Rear and side setbacks above street wall height</td>
<td>10m setback above street wall height</td>
</tr>
<tr>
<td>Lane way setbacks above street wall height</td>
<td>10m from the laneway centreline</td>
</tr>
<tr>
<td>Lane ways less than 10m in width</td>
<td>3 storey height limit</td>
</tr>
<tr>
<td>Maximum dimension in any direction for residential/tower forms</td>
<td>30m</td>
</tr>
<tr>
<td>Building separation above street wall height</td>
<td>20m [11+ storeys]</td>
</tr>
<tr>
<td>Sensitivity/restrictions for sensitive areas</td>
<td>9m [16 storeys]</td>
</tr>
<tr>
<td>Solar protection for the street wall height</td>
<td>3m ground floor setback at sensitive residential interface for at least 3m to be included in 1:1 street wall height</td>
</tr>
<tr>
<td>Identified location for future open space</td>
<td>Refer to open space on private land guidelines</td>
</tr>
</tbody>
</table>

Moonee Ponds Activity Centre Built Form & Density Framework: Hddy. + Co
Findings

- Maximum dimension (30m in any direction) for residential tower forms was found to be too restrictive in some circumstances
- Proposed building form outcome resulted in a Floor Area Ratio of 6.2:1
- 69% roof site coverage
- 10 storeys to Gladstone Street inappropriate for sensitive residential interface
- Additional height able to be accommodated to the north of the site

**Figure 86** Looking west along Gladstone Street

**Figure 87** Concept plan of potential built form outcome for 13 Pratt Street

**Recommended changes to or additional parameters**

1. Modify height control to increase height to the north to 12 storeys and reduce height to the south to 6 storeys
2. Introduce a Floor Area Ratio control to allow design objectives to be achieved within the built form envelope

*Moonee Ponds Activity Centre Built Form & Density Framework* Hojdyk + Co
2. Coles site - 18 Homer St

This large site is part of the Moonee Ponds Central complex and currently accommodates a Coles supermarket. The site is large (15421 square metres) and located to the north of the Moonee Ponds Activity Centre. With similar conditions to the Woolworth site, it interfaces a sensitive residential street to the north with predominantly single storey detached dwellings. However, the interface is slightly less sensitive as these sites are located to the north of the site. The large site will need to accommodate a public open space and north-south pedestrian links.

Summary of design decisions

- North-south pedestrian priority laneway to increase permeability and create a new vibrant street
- East-west service laneway to minimise servicing requirements on existing streets and proposed pedestrian laneways (allow for pedestrian access)
- 1200 square metres of public open space provided
- Opportunity to provide podium level private open space with excellent solar access
- 1:1 street wall heights to respond to the proportion of surrounding streets
- Ground floor landscape setbacks to Taylor Street to assist in the transition to low-scale residential
- Ground floor setbacks along Homer Street to widen the footpath to allow for increased pedestrian capacity
- Multiple buildings with a diversity of heights across the site and variable street wall heights that are responsive to context
- Tower elements are setback from the street and located away from sensitive interfaces
- Tower elements are slim to allow for high internal amenity, views of the sky between tower forms from the street and reduced visual bulk
- Chambered corner at Eddy Street and Homer Street intersection to increase pedestrian capacity and mitigate wind impacts

Figure 88 3D model of 18 Homer Street

Table 22 Proposed development controls for 18 Homer Street
Findings

- Maximum dimension 30m in any direction for residential tower forms was found to be too restrictive
- Proposed built form outcome resulted in a Floor Area Ratio of 4.5:1
- 65 per cent site coverage
- 10 storeys to Taylor Street inappropriate for a sensitive residential interface
- Additional height able to be accommodated to the south of the site

Revised Concept

1. Modify height control to reduce the height to the north to 6 storeys and increase height to the south to 15 storeys
2. Introduce a Floor Area Ratio control to allow design objectives to be achieved within the built form envelope

Figure 99 Concept plan of potential built form outcome for 18 Hervey Street

Moorneen Ponds Activity Centre Built Form & Density Framework: Hudp. + Co
3. 40 Hall Street

This large site (11,367 square metres) already has approval for a large mixed use development to be delivered in two stages. A potential built form outcome was modelled on the site according to the proposed parameters. This was undertaken as a benchmarking exercise to determine an alternative built outcome to the one proposed.

**Summary of design decisions**

- North-south pedestrian priority laneway to increase permeability and create a new vibrant street
- Service laneways to minimise servicing requirements on existing streets and proposed pedestrian laneways (allow for pedestrian access)
- 300 square metres of public open space provided
- 1:1 street wall heights to respond to the proportion of surrounding streets
- Multiple buildings with a diversity of heights across the site and variable street wall heights that are responsive to context
- Tower elements are setback from the street and located away from sensitive interfaces
- Tower elements are slim to allow for high internal amenity, views of the sky between tower forms from the street and reduce visual bulk
- Lower built form along pedestrian priority laneway and wrapping corner of private open space to create a welcoming human scale and relief from higher built form
- Opportunity for a mixture of commercial, residential apartments and townhouses afforded by diversity of floorplates to deliver housing diversity

**Figure 91 3D model of 40 Hall Street**

**Table 23 Proposed development controls for 40 Hall Street**

<table>
<thead>
<tr>
<th>Test parameters</th>
<th>15 storeys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Building Height</td>
<td></td>
</tr>
<tr>
<td>Street wall height</td>
<td>1:1</td>
</tr>
<tr>
<td>Street setbacks above street wall height</td>
<td>9m setback above street wall height</td>
</tr>
<tr>
<td>Rear and side setbacks above street wall height</td>
<td>10m setback above street wall height</td>
</tr>
<tr>
<td>Lanneys setback above street wall height</td>
<td>10m from the laneway centreline</td>
</tr>
<tr>
<td>Lanneys less than 10m in width</td>
<td>3 storey height limit</td>
</tr>
<tr>
<td>Maximum dimension in any direction for residential tower forms</td>
<td>30m</td>
</tr>
<tr>
<td>Building separation above street wall height</td>
<td>20m (10+ storeys)</td>
</tr>
<tr>
<td>9m (7-8 storeys)</td>
<td></td>
</tr>
<tr>
<td>Footpath widening</td>
<td>3m ground floor setback at identified locations for footpath widening</td>
</tr>
<tr>
<td>Identified location for future open space</td>
<td>Refer to open space on private land guidelines</td>
</tr>
<tr>
<td>Solar protection</td>
<td>No additional overshadowing over the street wall height of Pack a Street between 11am and 2pm on June 22</td>
</tr>
</tbody>
</table>

Moonee Ponds Activity Centre Built Form & Density Framework: Hodyt + Co
Findings

- Maximum dimension 30m in any direction for residential tower forms was found to be too restrictive.
- Proposed built form outcome resulted in a Floor Area Ratio of 6.9:1.
- 66% per cent site coverage.
- Any additional height above 15 storeys to the south of the site will overshadow the south side of Puckle Street between 11am and 2pm on June 22.

**Figure 92** Looking east along Hall Street

**Figure 93** Concept plan of alternate built form outcome for 40 Hall Street

Recommended changes to or additional parameters:

1. Introduce a Floor Area Ratio control to allow design objectives to be achieved within the built form envelope.
4. ALDI Site - 14 Hall St

This large site (10,437 square metres) has irregular dimensions and multiple private interfaces. It is located to the north of Puckle Street and has a street frontage onto Mount Alexander Road. The site is part of the Moonee Ponds Central complex and currently accommodates an ALDI supermarket alongside other commercial tenancies. There are opportunities for the inclusion of public and private ground-floor open space on the site and through-block links to increase permeability and allow servicing to be located away from street frontages.

Summary of design decisions

- East-west pedestrian priority laneway to increase permeability and create a new vibrant street (allows for views through the site to the Moonee Ponds Clocktower)
- North-south service laneway to minimise servicing requirements on existing streets and proposed pedestrian laneways (allow for pedestrian access)
- 1200 square metres of public open space provided
- 1000 square metres of private ground floor open space provided
- Public open space located on pedestrian priority laneway to ensure high levels of access
- 1:1 street wall heights to respond to the proportion of surrounding streets
- Ground floor setbacks along Hall Street to widen the footpath to allow for increased pedestrian capacity
- Multiple buildings with a diversity of heights across the site and variable street wall heights that are responsive to context
- Tower elements are setback from the street and located away from sensitive interfaces
- Tower elements are slim to allow for high internal amenity, views of the sky between tower forms from the street and reduce visual bulk

Figure 94 3D model of 14 Hall Street

<table>
<thead>
<tr>
<th>Test parameters</th>
<th>15 storeys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Building Height</td>
<td>5m setback above street wall height</td>
</tr>
<tr>
<td>Street wall height</td>
<td>10m setback above street wall height</td>
</tr>
<tr>
<td>Rear and side setbacks above street wall height</td>
<td>10m from the laneway centreline</td>
</tr>
<tr>
<td>Laneway setback above street wall height</td>
<td>3 storey height limit</td>
</tr>
<tr>
<td>Maximum dimensions in any direction for residential tower forms</td>
<td>20m [10+ storeys] 9m [6 storeys]</td>
</tr>
<tr>
<td>Solar protection</td>
<td>No additional overshadowing over the street wall height of Puckle Street between 11am and 2pm on June 22</td>
</tr>
<tr>
<td>Footpath widening</td>
<td>3m ground floor setbacks at identified locations for footpath widening</td>
</tr>
<tr>
<td>Identified location for future open space</td>
<td>Refer to open space on private land guidelines</td>
</tr>
<tr>
<td>Mt Alexander Road (north of the Junction)</td>
<td>Street wall height 20m</td>
</tr>
</tbody>
</table>

Table 24 Proposed development controls for 14 Hall Street

Moonee Ponds Activity Centre Built Form & Density Framework: Hedy + Co
Findings

- Proposed built form outcome resulted in a Floor Area Ratio of 4.7:1
- 61 per cent site coverage
- Open space should not be located on Homer Street as it would be significantly overshadowed by an approved 14 storey development to the north, instead it should be located internal to the site but located on a public pedestrian laneway to ensure it is publicly accessible

---

**Figure 95** Looking east towards the Moonee Ponds Clocktower on proposed east–west laneway

**Figure 96** Concept plan of potential built form outcome for 16 Hall Street

---

Recommended changes to or additional parameters

1. Introduce a Floor Area Ratio control to allow design objectives to be achieved within the built form envelope

---

Moonee Ponds Activity Centre Built Form & Density Framework

---
5. 740 Mount Alexander Road

This prominent site (1,689 square metres) is located at the junction at the intersection of Dean Street and Pascoe Vale Road. It is irregularly shaped and interfaces a sensitive residential property to the east. The L-shaped site has three street interfaces and three private interfaces. To the south is a laneway that extends only part way through the site. There is an opportunity to include a through block link within the site to increase permeability and break down the bulk of its very wide street frontage onto Dean Street (approximately 85m).

Summary of design decisions

- North-south pedestrian priority laneway to increase permeability through the site and reduce visual bulk along the wide street frontage
- East-west service laneways to the rear to minimise servicing requirements on existing streets and proposed pedestrian laneways
- 400 square metres of ground level private open space provided
- 1:1 street wall heights to respond to the proportion of surrounding streets
- Three storey street wall and ground floor landscape setback to the east of the site to provide a transition to low-scale residential
- Chambered corner at Dean Street and Ascot Vale Road intersection to increase pedestrian capacity and mitigate wind impacts
- Multiple buildings with a diversity of heights across the site and variable street wall heights that are responsive to context
- Transition in height from the east to respond to low-scale residential and reinforce the prominence of the tower located at the intersection
- Tower elements are tall to allow for high internal amenity and reduced visual bulk

Figure 72: 3D model of 740 Mount Alexander Road

<table>
<thead>
<tr>
<th>Test parameters</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Building Height</td>
<td>8</td>
</tr>
<tr>
<td>Street wall height</td>
<td>1:1</td>
</tr>
<tr>
<td>Street setbacks above street wall height</td>
<td>5m</td>
</tr>
<tr>
<td>Rear and side setbacks above street wall height</td>
<td>6m</td>
</tr>
<tr>
<td>Laneway setback above street wall height</td>
<td>6m</td>
</tr>
<tr>
<td>Laneways less than 10m in width</td>
<td>3</td>
</tr>
<tr>
<td>Maximum dimension in any direction</td>
<td>30m</td>
</tr>
<tr>
<td>Building separation above street wall height</td>
<td>12m</td>
</tr>
<tr>
<td>Solar protection</td>
<td></td>
</tr>
</tbody>
</table>

Table 28: Proposed development controls for 740 Mount Alexander Road
Findings

- Proposed built form outcome resulted in a Floor Area Ratio of 4.2:1
- 85 per cent site coverage
- Ground floor landscaped setback and three storey street wall height to manage sensitive residential interface
- June 22 solar protection of private open space is too prohibitive. Solar protection for private open space should be measured on September 22. This applies an appropriate hierarchy of protecting public open space to a higher degree than private open space.

Recommended changes or additional parameters

1. Introduce a Floor Area Ratio control to allow design objectives to be achieved within the built form envelope.
2. Modify the solar access control to be measured on September 22 instead of June 22.
3. Introduce ground floor landscape and a three storey street wall height at existing sensitive residential interfaces.

Figure 98: Looking south along Pascoe Vale Road from the tram platform [740 Mount Alexander Road to the north]

Figure 99: Concept plan of potential built form outcome for 740 Mount Alexander Road

Monee Ponds Activity Centre Built Form & Density Framework Hrdy + Co
6. 109 Puckle Street

This small site (690 square metres) is on the corner of Shuter Street and Puckle Street. The site is relatively shallow (30m) and is separated from the proposed Shuter Street park by a rear laneway.

**Summary of design decisions**

- Party wall to neighbouring building and outlook secured to the street and rear laneway for maximum internal amenity
- Street setback above 2 storeys to align with rhythm of heritage parapets along Puckle Street
- Sunlight access to Shuter Street protected above the street wall
- 3 storey street wall to rear laneway to achieve pedestrian friendly scale

**Figure 100: 3D model of 109 Puckle Street**

<table>
<thead>
<tr>
<th>Test parameters</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Building Height</td>
<td>4 storeys</td>
</tr>
<tr>
<td>Street wall height</td>
<td>1:1</td>
</tr>
<tr>
<td>Street setbacks above street wall height</td>
<td>9m setback above street wall height</td>
</tr>
<tr>
<td>Rear and side setbacks above street wall height</td>
<td>10m setback above street wall height</td>
</tr>
<tr>
<td>Laneway setback above street wall height</td>
<td>10m from the laneway centreline</td>
</tr>
<tr>
<td>Lanewayys (less than 10m in width)</td>
<td>3 storey height limit</td>
</tr>
<tr>
<td>Maximum dimension in any direction to residential boundary</td>
<td>30m</td>
</tr>
<tr>
<td>Building separation</td>
<td>20m [10+ storeys]</td>
</tr>
<tr>
<td></td>
<td>9m [6 storeys]</td>
</tr>
<tr>
<td>Sensitive residential interfaces</td>
<td>3m ground floor setback at sensitive residential interfaces (additional 3m to be included in 1:1 street wall height)</td>
</tr>
<tr>
<td>Footpath widening</td>
<td>3m ground floor setback at identified locations for footpath widening</td>
</tr>
<tr>
<td>Identified location for future open space</td>
<td>Refer to open space on private land guidelines</td>
</tr>
</tbody>
</table>

Table 26: Proposed development controls for 109 Puckle Street
Findings

- The 1:1 street wall height along Puckle Street is too high and would interrupt the rhythm of heritage parapets along the street.
- Proposed built form outcome resulted in a Floor Area Ratio of 3:6:1
- 100 per cent site coverage

**Figure 101** Looking south-west towards the corner of Shuter Street and Puckle Street

**Figure 102** Concept plan of potential built form outcome for 109 Puckle Street

---

**Recommended changes to or additional parameters**

1. Introduce a Floor Area Ratio control to allow design objectives to be achieved within the built form envelope.
2. Reduce street wall height to 2 storeys along Puckle Street with a 5m setback above the street wall.
7. 541 Mount Alexander Road

This is one of the larger sites [2805 square metres] located along Ascot Vale Road, a fine grain key activity street. The site has one street frontage and three private interfaces making it particularly constrained. There is opportunity to deliver a small open space or plaza for gathering and respite along this busy commercial street.

Summary of design decisions

- 1000 square metres of public open space provided
- 300 square metres of ground floor private open space
- 1:1 street wall heights to respond to the proportion of surrounding streets
- Party walling to side boundaries with outlook secured within the site and to the street
- Ground floor setback to the rear to secure outlook and daylight at rear to rear interface
- Multiple buildings with a diversity of heights across the site responding to context

![3D model of 541 Mount Alexander Road](image)

<table>
<thead>
<tr>
<th>Table 103</th>
<th>3D model of 541 Mount Alexander Road</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Test parameters</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Building Height</td>
<td>6 storeys</td>
</tr>
<tr>
<td>Street wall height</td>
<td>1:1</td>
</tr>
<tr>
<td>Street setbacks above street wall height</td>
<td>5m setback above street wall height</td>
</tr>
<tr>
<td>Rear and side setbacks above street wall height</td>
<td>4.5m setback above street wall height</td>
</tr>
<tr>
<td>Lane way setback above street wall height</td>
<td>4.5m from the laneway centreline</td>
</tr>
<tr>
<td>Ground floor setback</td>
<td>6m from rear to rear boundaries</td>
</tr>
</tbody>
</table>

| Identified location for future open space | Refer to open space on private land guidelines |

Table 27 Proposed development controls for 541 Mount Alexander Road

P112
Findings

- To accommodate an adequate open space on the site, the height needs to be increased from 6 storeys to 8 storeys. Although this will result in increased overshadowing in the afternoon, the site has excellent solar access until midday.
- Proposed built form outcome resulted in a Floor Area Ratio of 3.8:1.
- 62 per cent site coverage.

![Figure 104](image1.png)

Figure 104: Looking west along Addison Street towards 541 Mount Alexander Road

![Figure 105](image2.png)

Figure 105: Concept plan of potential built form outcome for 541 Mount Alexander Road

Recommended changes to or additional parameters:

1. Modify height control to increase the height on this site from 6 storeys to 8 storeys.
2. Introduce a Floor Area Ratio control allowing design objectives to be achieved within the built form envelope.

Meenee Ponds Activity Centre Built Form & Density Framework. Hecijal + Co
8. Cinema site - 17 Puckle Street

This site has a current development application that consolidates two sites together. The site to the north is on Puckle Street and the site to the south is on Young Street, spanning across Penny Lane. The sites are 1,157 square metres and 1,147 square metres respectively.

Summary of design decisions

- 1:1 street wall height to Young Street
- Street setbacks above 2 storeys to align with rhythm of heritage parapets along Puckle Street
- Party wall to neighbouring building and outlook secured to the street and rear laneway for maximum internal amenity
- 3 storey street wall to rear laneway to achieve pedestrian friendly scale
- Multiple buildings with a diversity of heights across the site and variable street wall heights that are responsive to context
- East-west open-to-air laneway retained and used to access underground carparks (traffic analysis required)
- Ground floor landscaped rear setback to Penny Lane [southern building] to increase building separation and allow for solar access and outlook.

Figure 10: 3D model of 17 Puckle Street

<table>
<thead>
<tr>
<th>Test parameters</th>
<th>4 storeys, 6 storeys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street wall height</td>
<td>1:1</td>
</tr>
<tr>
<td>Street setbacks above street wall height</td>
<td>3m (6 storeys)</td>
</tr>
<tr>
<td>Rear and side setbacks above street wall height</td>
<td>6.5m (6 storeys)</td>
</tr>
<tr>
<td>Laneway setbacks above street wall height</td>
<td>4.5m from the laneway centroid</td>
</tr>
<tr>
<td>Laneways (less than 10m in width)</td>
<td>3 storey height limit</td>
</tr>
</tbody>
</table>

Table 26: Proposed development controls for 17 Puckle Street
Findings

- Proposed build form outcome resulted in a Floor Area Ratio of 2.8:1 (north) and 3.9:1 (south)
- 100 per cent site coverage (north)
- 85 per cent site coverage (south)
- The 1:1 street wall height along Puckle Street is too high and would interrupt the rhythm of heritage parapets along the street.

Figure 107: Looking east along Punny Lane

Figure 108: Concept plan of potential built form outcome for 17 Puckle Street

Recommended changes to or additional parameters:
1. Introduce a Floor Area Ratio control to allow design objectives to be achieved within the built form envelope
2. Reduce street wall height to 2 storeys along Puckle Street with a 5m setback above the street wall (refer to previous recommendation)

Hume Ponds Activity Centre Built Form & Density Framework: Hockl + Co
9. 3 Sydenham Street

This medium sized site (1,761 square metres) is to the west of the railway line and is currently a carpark. The western interface of the site fronts Sydenham Street, a sensitive residential interface with predominantly single storey detached dwellings. To the south of the site there is a laneway and to the north and east private interfaces.

Summary of design decisions

- Service requirements located on the southern laneway to minimise servicing on primary street frontage
- Ground floor landscape setbacks to Sydenham Street to assist in the transition to low-scale residential
- 300 square metres ground floor private open space
- 1:1 street wall heights to respond to the proportion of surrounding streets

![Image: 3D model of 3 Sydenham Street]

**Table 29** Proposed development controls for 3 Sydenham Street

<table>
<thead>
<tr>
<th>Test parameters</th>
<th>4 storeys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street wall height</td>
<td>1:1</td>
</tr>
<tr>
<td>Street setbacks above street wall height</td>
<td>3m setback above street wall height</td>
</tr>
<tr>
<td>Rear and side setbacks above street wall height</td>
<td>N/A</td>
</tr>
<tr>
<td>Laneways (less than 10m in width)</td>
<td>3 storey height limit</td>
</tr>
</tbody>
</table>

Hoonee Ponds Activity Centre Built Form & Density Framework H+b Architects + Co
Findings

- Proposed built form outcome resulted in a Floor Area Ratio of 2.5:1
- 65 per cent site coverage

Figure 110 Looking north along Sydenham Street

Figure 111 Concept plan of potential built form outcome for 3 Sydenham Street

Recommended changes to or additional parameters
1. Introduce a Floor Area Ratio control to allow design objectives to be achieved within the built form envelope
10. 615 Mount Alexander Road

This small (476 square metres) yet prominent triangle site is located at the junction and is highly visible when travelling south along Mount Alexander Road and Pascoe Vale Road. The site has two site frontages and one private interface to the rear.

Summary of design decisions

- High street wall reinforces intersection and improves legibility by creating an architecturally significant building at the termination of long vistas
- Chamfered corner to mitigate wind impact and increase pedestrian capacity at the intersection

<table>
<thead>
<tr>
<th>Test parameters</th>
<th>615 Homer Street</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Building Height</td>
<td>8 storeys</td>
</tr>
<tr>
<td>Street wall height</td>
<td>1:1</td>
</tr>
<tr>
<td>Street setbacks: above street</td>
<td>5m setback above street wall height</td>
</tr>
<tr>
<td>Rear and side setbacks: above</td>
<td>6m setback above street wall height</td>
</tr>
<tr>
<td>street wall height</td>
<td></td>
</tr>
</tbody>
</table>

Table 30: Proposed development controls for 615 Mount Alexander Road
Findings

- Proposed built form outcome resulted in a Floor Area Ratio of 6.4:1
- 96 per cent site coverage
- High street wall would need to be subject to wind modelling

Figure 113: Looking south along Pascoe Vale Road

Figure 114: Concept plan of potential built form outcome for 615 Mount Alexander Road

Recommended changes to or additional parameters

1. Introduce a Floor Area Ratio control to allow design objectives to be achieved within the built form envelope.

Meonee Ponds Activity Centre Built Form & Density Framework: Hoddle + Co
11. 23-29 Dean Street

This medium sized site (2472 square metres) has very high amenity with three street frontages and one private frontage. To the east of the site is the Moonee Valley Racecourse, a site proposed for urban renewal.

Summary of design decisions

- East-west service laneway to minimise servicing requirements on existing streets and proposed pedestrian laneways
- 250 square metres of ground floor private open space
- 1:1 street wall heights to respond to the proportion of surrounding streets
- Ground floor landscape setbacks to Dean Street to assist in the transition to low-scale residential

Figure 118: 3D model of 23-29 Dean Street

<table>
<thead>
<tr>
<th>Test parameters</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Building Height</td>
<td>6 storeys</td>
</tr>
<tr>
<td>Street wall height</td>
<td>1:1</td>
</tr>
<tr>
<td>Street setbacks above street wall height</td>
<td>3m setback above street wall height</td>
</tr>
<tr>
<td>Rear and side setbacks above street wall height</td>
<td>4.5m setback above street wall height</td>
</tr>
<tr>
<td>Solar protection</td>
<td>No additional overshadowing over the street wall height of rear private open space (to the south) between 11am and 3pm on June 22</td>
</tr>
</tbody>
</table>

Table 31: Proposed development controls for 23-29 Dean Street
Findings

- Proposed built form outcome resulted in a Floor Area Ratio of 4:2:1
- 76 per cent site coverage

Figure 116 Looking west along Dean Street

Recommended changes to or additional parameters

1. Introduce a Floor Area Ratio control to allow design objectives to be achieved within the built form envelope.

Figure 117 Concept plan of potential built form outcome for 23-29 Dean Street

Moonee Ponds Activity Centre Built Form & Density Framework: Hdyt. + Co
Cumulative overshadowing

Overshadowing diagrams illustrating the cumulative impact of overshadowing of the 11 sites tested. As demonstrated in these diagrams, key public spaces are protected from overshadowing through the proposed controls.

In particular, it is clear in these shadow diagrams that the south side of Puckle Street will be protected from overshadowing by reinforcing the existing 15 storey height limit that applies to the large sites to the north. Recent approvals in this precinct have overshadowed the south side of Puckle Street, currently the most important public space in the centre.

Figure 118 11am June 22

Figure 119 12pm June 22
## Testing outcomes

This table summarises the outcomes measured through the site specific design testing.

<table>
<thead>
<tr>
<th>Building height</th>
<th>Address</th>
<th>Site area (sqm)</th>
<th>Gross Floor Area (sqm)</th>
<th>Floor Area Ratio (FAR)</th>
<th>Site Coverage (%)</th>
<th>Proposed change to building height (storeys)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 storeys</td>
<td>3 Sydenham Street</td>
<td>1 741</td>
<td>4 296</td>
<td>2.5</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td></td>
<td>109 Pickle Street</td>
<td>690</td>
<td>2 465</td>
<td>3.6</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td></td>
<td>17 Pickle Street North (Cinema Redevelopment)</td>
<td>1 197</td>
<td>3 264</td>
<td>2.8</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>6 storeys</td>
<td>23-29 Dean Street</td>
<td>2 472</td>
<td>10 411</td>
<td>4.2</td>
<td>76</td>
<td></td>
</tr>
<tr>
<td></td>
<td>17 Pickle Street South (Cinema Redevelopment)</td>
<td>1 447</td>
<td>5 697</td>
<td>3.9</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td></td>
<td>40 Neil Street West</td>
<td>1 810</td>
<td>8 639</td>
<td>4.8</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>8 storeys</td>
<td>415 Mount Alexander Road</td>
<td>476</td>
<td>3 938</td>
<td>6.4</td>
<td>96</td>
<td></td>
</tr>
<tr>
<td></td>
<td>740 Mount Alexander Road</td>
<td>1 689</td>
<td>7 084</td>
<td>4.2</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td></td>
<td>841 Mount Alexander Road</td>
<td>2 825</td>
<td>10 786</td>
<td>3.8</td>
<td>62</td>
<td>8 to deliver public open space</td>
</tr>
<tr>
<td>10 storeys</td>
<td>13 Pratt Street (Woolworths Site)</td>
<td>13 931</td>
<td>58 283</td>
<td>4.2</td>
<td>69</td>
<td>6 and 12 to manage sensitive Interface</td>
</tr>
<tr>
<td></td>
<td>10 Horner Street (Coles Supermarket)</td>
<td>15 621</td>
<td>69 429</td>
<td>4.3</td>
<td>65</td>
<td>6 and 15 to manage sensitive Interface</td>
</tr>
<tr>
<td>15 storeys</td>
<td>14 Hill Street (ALDI Supermarket)</td>
<td>10 437</td>
<td>69 556</td>
<td>4.7</td>
<td>61</td>
<td></td>
</tr>
<tr>
<td></td>
<td>40 Hill Street East</td>
<td>11 567</td>
<td>57 166</td>
<td>4.9</td>
<td>66</td>
<td></td>
</tr>
</tbody>
</table>

Table 32: Outcomes measured through 3D site testing.

Hume Ponds Activity Centre Built Form & Density Framework: Hjulj. + Co
Appendix B

Summary of changes to document post-consultation

These changes respond to submissions received during the consultation period that was held in mid-2019, further strategic work undertaken by Council and additional built form testing that was undertaken subsequent to the consultation period.

Changes to solar controls

Minor updates to the proposed solar controls have been proposed. The following updates have been made:

- Puckle Street solar controls changed from a mandatory winter solstice control to a spring equinox control as a high proportion of Puckle Street south is already overshadowed at the winter solstice.
- Mandatory solar controls that applied to indicative open spaces were removed as there remains some uncertainty about the exact location of these spaces.
- Introduction of a mandatory solar control (spring equinox) applied to the south side of Alexandra Avenue to support its transformation into a green boulevard that connects the racecourse to central Moonee Ponds.

Changes to height controls, street wall height controls and FAR controls

The method for translating storeys into metres was modified which led to minor variations to the overall allowable heights across the activity centre. The overall height strategy is predominantly unchanged with minor changes occurring in the following specific streets and sites:

- Increase of heights on Eversage Street (non-large sites), south side of Hall Street and north site of Young Street to 8 storeys.
- Reduction of heights for several sites on the west side of Mt Alexander Road from 10 storeys to 8 storeys.

- Reduction of height from 12 storeys to 8 storeys for a single site on Pratt Street.
- Increase the height provision from 16m to 16m on Puckle Street to allow for greater floor to floor heights (l4m) that support commercial uses.
- Heights reduced from 4 storeys to 3 storeys on the east side of Margaret Street and on the south side of Sydenham Street. This is in response to a row of individually significant heritage buildings in these locations.
- Remove split height/FAR controls from the site at the corner of Taylor Street and Mount Alexander Road and adopt the higher height control (15 storeys).
- Align 4 storey street wall heights (expressed in metres) with modified overall heights (15m to 14m).

Policy guidance clarifications

Further policy guidance was provided to assist in the application of specific policy mechanisms. This included:

- Additional guidance on street wall specifying that the higher street wall should be adopted, transitioning to the lower street wall height as appropriate.
- Clarification on the depth that height/FAR controls apply on sites with split controls.
- Future open spaces on private sites marked as indicative to support design flexibility in the specific location and size of open space within the site.

Changes to setback controls

The following changes have been made to the setback controls to support site-specific design responses:

- Setbacks changed from mandatory to discretionary where there is a FAR in place. The only setback controls that remains mandatory are sites with a rear to rear interface condition.
- References to side and rear setbacks applying above the street wall has been removed. If buildings are not built on
the boundary then the required below street wall setbacks apply.

**Changes to FAR / FAU controls**

The following changes have been made to the FAR and FAU controls following additional testing of commercial and residential building typologies:

- Refinement of the FAU mechanism to focus on the delivery of affordable housing. A capped FAU of 0.5:1 is proposed on all sites.
- FAR control removed from Puckle Street.
- Removal of potential increase in FAR for commercial uses.
- Minor reductions to proposed FAR controls on selected sites to respond to further built form testing.
Moonee Valley Language Line

<table>
<thead>
<tr>
<th>Language</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic</td>
<td>9280 0738</td>
</tr>
<tr>
<td>Cantonese</td>
<td>9280 0739</td>
</tr>
<tr>
<td>Croatian</td>
<td>9280 0740</td>
</tr>
<tr>
<td>Greek</td>
<td>9280 0741</td>
</tr>
<tr>
<td>Italian</td>
<td>9280 0742</td>
</tr>
<tr>
<td>Somali</td>
<td>9280 0743</td>
</tr>
<tr>
<td>Spanish</td>
<td>9280 0744</td>
</tr>
<tr>
<td>Turkish</td>
<td>9280 0745</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>9280 0746</td>
</tr>
</tbody>
</table>

All other languages 9280 0747
National Relay Service 13 35 77 or relayservice.com.au
This publication is available in alternative accessible formats on request.
Moonee Ponds Activity Centre
Streetscapes and Public Spaces Plan
“Cities are not built forms, they are social forms.”

菲斯·雷德克，《城市：设计城市的社交生活》
Contents

1. INTRODUCTION
   1.0 Introduction  6
   1.1 Background  7

2. DESIGN APPROACH
   2.0 Overview  9
   2.1 Spatial Structure  11
   2.2 Pedestrian Movement  12
   2.3 Public Open Spaces  14
   2.4 Tree Planting and Water Sensitive Urban Design (WSUD)  16
   2.5 Preferred Interfaces and Setback  18

3. DESIGN ELEMENTS  19
   3.0 Overview  20
   3.1 Material  21
   3.2 Tree Planting  24
   3.3 Street Furniture  27
   3.4 Public Lighting  28
   3.5 Signage  30
   3.6 Public Art and Activation  31
   3.7 Design Interface  32

4. STREETSCAPE DESIGN  33
   4.0 Overview  34
   4.1 Puckle Street  35
   4.2 Hall Street  40
   4.3 Homer Street  45
   4.4 Eversage Street  49
   4.5 Shuter Street  52
   4.6 Pilet Street  55
   4.7 Young Street  58
   4.8 Margaret Street South  62
   4.9 Margaret Street North  64
   4.10 Moore Street  66
   4.11 Taylor Street  67
   4.12 Gladstone Street  69
   4.13 Mount Alexander Road  70
   4.14 Pascoe Vale Road  71
   4.15 Ascot Vale Road  72
   4.16 Holmes Road  73
   4.17 Dean Street  75
   4.18 Alexandra Avenue  76
   4.19 Kellaway Avenue  78
   4.20 Laneways  80
1. INTRODUCTION
1.0 Introduction

**Streetscapes and Public Spaces Plan**

The Streetscapes and Public Spaces Plan (SPSP) provides the overall design outlook for the Moonee Ponds Activity Centre (MPAC) to 2040. The SPSP prioritises the pedestrian experience and is to be used as the guideline for all streetscapes and public space works in MPAC. This is to ensure all investment presents MPAC as a cohesive activity centre with a consistent design language and materiality. An attractive public realm will improve liveability, viability and commercial opportunity in MPAC.

Guided by the MV2040 Strategy’s (MV2040) urban design principles (refer to page 106 in MV2040), the SPSP’s key purpose is to reinvent MPAC as a vibrant pedestrian-friendly centre through a well-designed and integrated streetscape network. This direction aligns with Council’s vision to achieve a healthy city connected by beautiful, sustainable and resilient neighbourhoods. The SPSP consists of three critical parts:

- **Design Approach**
  - Design logic and structural hierarchy of the public realm, including the proposal of new public open spaces.

- **Design Elements**
  - Guidelines for streetscapes, including design components such as pedestrian pathways.

- **Streetscape Design**
  - High level concept designs for the pedestrian realms of key streets.

**Moonee Ponds Activity Centre**

MPAC is one of six Major Activity Centres identified in Plan Melbourne 2017-2050 (Plan Melbourne) for Moonee Valley. It holds an important role as the destination for retail, business, civic, cultural, creative and entertainment uses not only for the neighbourhood of Moonee Ponds, but also for the rest of the city and for Melbourne’s north-west region. It is well-serviced by public transport and with its proximity to Melbourne’s CBD, it is well placed to accommodate a growing and changing population.

MPAC will see an increase in higher-density living and with the influx of people, its streets and public spaces will need to become the ‘backyard’ for many. The design of the city and its management in response to the changes is critical to its success. It is an exciting opportunity for MPAC to improve its urban structure. The SPSP aims to guide the creation of an attractive, green and vibrant public realm that caters for future growth while still maintaining elements of what is loved about the centre.

**Design Process and Implementation**

The design phases and implementation of the streetscape designs outlined in the SPSP will span until 2040 and will be delivered in a staged process. Moreover, it will be delivered through various funding streams such as the operational budget, Long Term Capital Works Plan (LTCWP) and proposed Development Contributions Plan (DCP).

The implementation of the streetscape designs proposed in the SPSP are subject to further factors which include, but are not limited to:

- capital works and operational budget priorities
- feasibility assessments and design development
- alignment with the implementation of other projects in the vicinity
- community consultation and input on specific/individual projects
- state government priorities and available funding
- negotiations with stakeholders/landowners through the planning process.
1.1 Background

Moonee Ponds Activity Centre Review

In December 2016, MPAC was announced as part of the State Government’s Activity Centre Pilot Program to review heights in the Activity Centre Zone. During this time, the MPAC project has evolved into a comprehensive review holistically looking at the form, function, use and character of the centre. This has been guided by MV2040’s vision for a healthy city. The SPSP forms an integral part of this review and proposes high level streetscape designs to complement the key recommendations of the MPAC: Built Form (Hovly + Co, 2019) and MPAC: Transport (Traffic Group, 2019) documents.

The ultimate objective of the MPAC review is to produce the MPAC Local Plan that incorporates the key recommendations of all the work undertaken, and draft appropriate planning controls for the Moonee Valley Planning Scheme.

Policy Context

Plan Melbourne identifies a network of varied levels of activity centres. As a Major Activity Centre, MPAC is to serve as a focal point for services, employment, housing, public transport and social interaction.

MV2040 is Council’s long term plan for improving the health, vibrancy and resilience of Moonee Valley over the next two decades. The MV2040 vision for Moonee Ponds is that by 2040, the activity centre will:

- be the premier business, civic, cultural, creative, community and entertainment destination of Moonee Valley
- be an attractive, cosmopolitan city centre that fosters creativity and imagination, which includes attractive and functional public spaces for events and activities
- be a well-connected centre with a safe and accessible public transport interchange and an excellent network of walking and cycling connection within and to other neighbourhoods
- have maximised the variety of resilient and vibrant green spaces
- have encouraged a diverse range of housing choices and affordable housing options
- have encouraged high quality architecture and design in all development
- have celebrated and protected the valued heritage qualities of MPAC.
2. DESIGN APPROACH
2.0 Overview

This section sets out the spatial framework and design logic for MPAC's public realm. The aim is to reinvent MPAC as a vibrant pedestrian-friendly centre that is healthy, sustainable and attractive, through a well designed, connected and integrated network of streetscapes that is supported by transport design, architectural design and place-making. This is interspersed with an abundant and dynamic mix of public open spaces.

The realisation of the vision will be initiated by both public and private entities working together to establish a strong identity for the activity centre.

Design Principles

- Prioritise and create opportunities for positive pedestrian experiences through design excellence.
- Create strong pedestrian connectivity and permeability supported by a public transport network.
- Use street tree planting to define the space hierarchy and legibility, as well as a key composition to the pedestrian realm design.
- Emphasise sustainability and innovation in design and practice.
- Celebrate MPAC's sense of place with evolving heritage.
- Capitalise and bring life to laneways.
2. Design Approach

2.1 Spatial Structure

The public realm design for MPAC will be based on a simple spatial structure to encourage clear and strong legibility of the activity centre.

Civic Triangle

The Civic Triangle encompasses the area occupied predominantly by civic and heritage buildings such as the Civic Centre, Essendon Historical Society, Moonee Ponds Police Station, Anglican Church and the Clocktower. This area, adjoining Mt Alexander Road and its central median, Kellaway Avenue, and Pascoe Vale Road, will feature the highest quality of design and civic materiality complementing the heritage buildings and reflecting its civic nature. A comprehensive masterplan should be carried out to re-imagine the Civic Triangle with high permeability and connectivity, provision of a public plaza and better street interfaces while protecting and complementing the heritage buildings.

Junction Plaza - Transport Plaza Zone 1

The Junction Plaza is a major transport junction currently consisting of intersecting major arterial roads, tram stop and bus interchange. The Junction Plaza should be designed to read as one plaza space by establishing a strong street wall on the eastern facade as a backbone, the tram stop as a focal point, and to include the whole width of road reserves to the eastern edge of the junction and down to triangular site at the tip of Mt Alexander Road and Ascot Vale Road intersection. An improved pedestrian environment and connectivity should be prioritised, including improved movement of crossings connecting the east and west parts of MPAC. There should be a strong design relationship between the Junction Plaza and Station Plaza while maintaining a consistent design language of the Civic Triangle.

Station Plaza - Transport Plaza Zone 2

The Station Plaza consists of the Moonee Ponds Train Station and the western entry into MPAC. It is proposed that Station Plaza read as one space with the Moonee Ponds Train Station as a focal point, to include the whole width of the adjacent road reserves of Margaret Street and Norwood Crescent, as well as the Puckle, Holmes, Moore junction and the train crossing. Junction Plaza and Station Plaza should be designed so they become two related spaces bookending the major MPAC pedestrian thoroughfare of Puckle Street.

Heart of MPAC

The central core of the MPAC shopping precinct is in the centre of the inner MPAC Loop, consisting of a central raised pedestrian crossing on Puckle Street and Pratt Street intersection, and a raised pedestrian crossing on Hall Street between Everage Street and the Moonee Ponds Central Shopping Centre. The existing arcade thoroughfare of the Moonee Ponds Central Shopping Centre is a vital connector of these spaces and it is strongly recommended to be retained. Additional thoroughfares are recommended for increased connectivity. The new heart will reinforce a hub for the inner MPAC with spatial allowance for community activities that will further strengthens MPAC as the primary activity centre in Moonee Valley.

Inner MPAC

The Inner MPAC is an area inside of the MPAC transport loop consisting of Taylor Street, Mt Alexander Road, Ascot Vale Road, Gladstone Street, Moore Street and Margaret Street. By diverting inner vehicular traffic to the outer loop, this area is envisaged to become a highly pedestrian friendly centre with increased and well dispersed public open space interconnected with high quality streetscapes.

Racecourse Redevelopment

The creation of a public open space hub within the Moonee Ponds Racecourse redevelopment is recommended in close proximity to Alexandra Avenue, with major pedestrian connections to the inner MPAC via Alexandra Avenue.

It is intended the area encompassed by Pascoe Vale Road, Thomas Street, Dean Street, and the new north-south street: within the Moonee Ponds Racecourse Development become a pedestrian-friendly environment, comparative to the Inner MPAC.

Pedestrian Connection

The areas mentioned above will be linked by a strong pedestrian connection. Puckle Street and Alexandra Avenue are two major pedestrian thoroughfares linking all of the key quarters within the MPAC.
2.2 Pedestrian Movement

streetscape designs will prioritise walking in MPAC, particularly around the main streets. Reduced vehicle traffic speeds and volume as well as spatial requirements, including on-street parking bays as recommended in MPAC. Transport will underpin the creation of attractive pedestrian realm. An attractive walking environment will be supported by increased pedestrian movement permeability through improved laneways and arcades interconnecting the main streets. Local destinations within the intricate pedestrian network are to be promoted.

Improved pedestrian amenity will be achieved by a mix of generous pedestrian spaces as well as strategically positioned shared areas. These spaces will be designed with high quality and tactile materials with continuous tree canopy cover.

DOA compliance and ample pedestrian facilities that include street furniture, amenity planting, lighting, public art and wayfinding facilities should form a part of the high quality streetscape design.

Generous building setbacks and active building interfaces that contribute to the public realm including footpath tracing should generally be encouraged.

Main Pedestrian Link
Puckle Street, Hall Street, Homer Street and Alexandra Avenue are identified as main pedestrian link in MPAC. The conversion of two directional carriageways to a single lane of one directional carriageways, including the removal of appropriate on-street parking will create significant opportunities for these east-west streets connecting the Civic Centre to the Moonee Ponds Train Station.

Consolidated direct pedestrian crossings should be considered across Mt Alexander Road connecting Hall Street and Alexandra Avenue to enforce the main east-west pedestrian thoroughfare.

Secondary Pedestrian Link
Secondary streets typically run north-south and interconnect with the main streets. The conversion of two directional carriageways to single lane one directional carriageways, including the removal of appropriate on-street parking will create opportunities for these streets to become pedestrian-friendly.

Other Pedestrian Links
MPAC has a wealth of small streets, laneways and arcades. These are valuable assets abound with heritage, character and human-scaled design which the MPAC public space network should capitalise on. The proposed streetscapes in the SPSP make the most use of these spaces and enhance their attraction by minimising vehicular access, activating well designed interfaces, introducing public art, encouraging further connectivity, and establishing an intimate network of unique pedestrian experiences. These links will typically have shared area arrangement designed to prioritise pedestrian circulation.

Shared Area
A shared area arrangement is proposed extensively throughout MPAC to promote and reinforce the pedestrian oriented environment.
Identified key links:

**Main Pedestrian Link**
- Pickle Street
- Hall Street
- Homer Street
- Alexandra Avenue

**Secondary Pedestrian Link**
- Everage Street
- Pratt Street
- Shuter Street
- Young Street
- Eddy Street

**Other pedestrian links**
- Primary Laneways
  - Hallkeeper Lane
  - Pickle Lane
  - Shuter Lane
  - St Aldens Lane
  - Sydenham Street right-of-way (ROW)
- Secondary Laneways
  These are smaller service laneways and private arcades that still form an important part of pedestrian network.

**Shared Area**
Pedestrian crossing points on:
- Hall Street
- Pickle Street
- Pratt Street north
- Pratt Street and Young Street intersection
- Shuter Street north
- Alexandra Avenue and Walker Street intersection

*FIGURE 3: PEDESTRIAN MOVEMENT HIERARCHY*
2.3 Public Open Spaces

MPAC currently provides limited public open space opportunities. In order to supplement and further cater for the forecast increase in population, a range of types and sizes of new public open spaces are recommended to be allocated throughout the centre. Where appropriate, solar access controls are proposed to protect the amenity of the public spaces.

These spaces will become pedestrian destinations to stop, rest and play while further contributing to a strong sense of place.

For further details, refer to MPAC: Public Open Spaces document.

Existing Public Open Spaces

The only existing open spaces in close proximity to MPAC is Queens Park and an area within the central median of Mt Alexander Road in front of the Clocktower Centre. Opportunities to provide new public open spaces within MPAC is a priority for Council.

New Public Open Spaces

The locations of potential new public open spaces have been selected based on multiple factors such as solar access and shade, proximity to key pedestrian nodes including shopping streets and public transport hubs, as well as current use and ownership of the subject land.

There are opportunities for potential new public open spaces to be incorporated as part of the redevelopment of the identified sites. They will be progressively realised subject to future car parking demands and consultation as well as timing, budget, and negotiations with key stakeholders.

Even distribution of public open spaces throughout MPAC is sought. These will be linked by multiple routes of pedestrian thoroughfares. The ultimate scenario aims to have public open spaces roughly distributed within 1-2 minutes walking distance from each other.

It is also envisaged that MPAC’s pedestrian friendly streetscape will function as public open space sufficient to cater to the needs of growing population.

FIGURE 4: NEW PUBLIC OPEN SPACES
Potential / Current Projects

1. Moonee Ponds Train Station
   The Moonee Ponds Train Station upgrade presents an opportunity for improved public realm outcomes. A generous and green station plaza would play a vital role as a public transport entry into Moonee Ponds. Council will advocate for solutions that will deliver the broadest of public benefits for the community.

2. Moonee Ponds Junction
   A new public open space incorporated with the Junction will anchor the eastern edge of MPAC and act as a connector across Passoo Vale Road through to the Moonee Valley Racecourse precinct.

3. Mt Alexander Road Triangle Site
   This site has been acquired by Council and is earmarked as a green relief space with activities within the overcrowded Junction area.

4. Pratt Street Park (private land)
   An underground car park with opportunity for new public open space, ideally at ground level, is proposed. Possibilities also include a multipurpose civic/market plaza or skate park.

5. Shuter Street Park
   An underground/aboveground multi-deck car park incorporating a new public open space is proposed. This park would be highly accessible from the main shopping streets in the inner MPAC and it is envisaged as a people's space that includes shelter, screening, ample seating and a play space complementing the adjacent child care facility. Should it be an underground structure, it should be designed with arias of deep soil plantings to accommodate large trees. Existing established trees on the road edge are recommended to be retained.

6. Homer Street Pocket Park
   Small pocket plaza with raised tree planting and seating is proposed.

7. North-South Link Plaza between Homer and Hall Streets
   An extensive community plaza is proposed. This should feature high quality paving, terraced seating, feature planting and lighting, and a community space.

8. Moonee Ponds Racecourse Park (private land)
   The Moonee Ponds racecourse redevelopment will accommodate a range of open spaces with a minimum total area of 7,000m², including a 5,000m² open space as indicated.

9. Margaret Street Micro Space
   There is an opportunity to create a small pocket seating space within the existing streetscape under existing mature trees on the east side of Margaret Street opposite the Moonee Ponds Train Station. It is further suggested the adjacent sites be identified to accommodate potential open space for fresh food and a specialty community market.

10. Eddy Street Park (private land)
    Opportunity for a new public open space, ideally at ground level, is proposed. Existing established trees on the road edge are to be retained.

11. Mt Alexander Road Central Median Civic Space
    In partnership with the State Government and other key stakeholders, Council should investigate the improvement of the existing bus interchange and car parking areas to establish a new public open space. This will form a new frontage and interface to the Moonee Ponds Civic Centre.

12. Des Nunan Park
    The current car park on Hall Street is recommended to be transformed into a green park.

13. St Aidan’s Lane Pocket Plaza
    A small node plaza in Fenny Lane is proposed. This would create a focal point in MPAC’s intricate laneway network.

14. Ascot Vale Road Pocket Park
    A pocket park on Ascot Vale Road will provide a green focal point and a much needed open space at the end of Gladstone Street.

15. Mt Alexander Road Park (private land)
    Opportunity exists to include a public open space development as part of the redevelopment of this large land holding.

16. Homer Street/Hall Street Plaza (private land)
    Opportunity exists to include a public open space at key pedestrian entry points as part the redevelopment of this large land holding. Preference is for these spaces to directly address.

17. Phillips Arcade Pocket Park (private land)
    A small green park at the end of Phillips Arcade will create a green pocket within MPAC’s intricate laneway network. A glimpse of greenery from Puckle Street will entice and draw pedestrians to the laneway.
2.4 Tree Planting and Water Sensitive Urban Design (WSUD)

Enhancing Moonee Valley’s urban forest will provide much needed shade and cooling for the community and encourage walking, cycling and recreation to occur in the public realm. Tree planting can also provide a role in ecological health and resilience. The SPSP seeks to increase MPAC’s tree canopy cover and greening while retaining and protecting existing trees, particularly where pedestrian traffic is expected to increase.

Where possible, WSUD treatment should be considered to improve local ecological resilience and stormwater filtration. The types of WSUD treatments that may be used include rain gardens, passive irrigation, structural soil and porous paving.

Existing Trees

Existing trees are assets to the community and strongly contribute to the sense of place. In principle, these should be retained and protected.

Where tree removal is unavoidable, new established tree planting should occur to compensate these losses to public amenity. There is a number of trees in MPAC that are registered on the Moonee Valley Significant Tree Register. These trees must be retained and protected.

Tree Planting

Avenue tree planting is encouraged in all streets to create continuous canopy cover throughout MPAC. Tree planting design should assist with the legibility of street hierarchy and typology. Species should be selected with this in mind, as well as streetscape character, scale and space allowance. Extra tree planting opportunities should be sought in between on-street parking bays as well as kerb outstands at street intersections.

Structural Soil

Structural soil is an engineered medium that can be compacted to pavement design requirements while permitting growing media within the same space for root growth. It is also provided as a proprietary load bearing cell system where voids can be filled with horticultural soil for tree root growth.

When the water soaks into the structural soil it passively irrigates the trees. The roots of these trees are able to grow freely in a greater volume of soil space giving the tree a stable base and encouraging better growth and health.

Installation of structural soil where new pavement is being installed should be considered.

Deep Root Planting

Deep root planting is defined as tree planting on ‘terra firma’ as opposed to tree planting above structures, such as a basement, and should be 100% open to the sky. Public open spaces within new development sites must have a minimum 10% of the total site area allocated to deep root planting, exclusively for landscaping at ground level to allow for large canopy tree planting and passive WSUD solutions.

The wide pedestrian priority streets presents opportunities for increasing soil volume and the area of permeable surfaces. Introduction of structural soil and permeable paving should be explored where feasible.

Plant Containers

Permanent containers for tree planting is not a recommended feature in MPAC due to space restrictions as well as the potential for containers to create clutter and obstruct pedestrian permeability.

Where in-ground street tree planting is absolutely impossible due to site conditions such as underground services, and where there is enough space to do so, container planting may be considered as a last resort.

In small streets and laneways, opportunities may exist for kerb side pot plant installations maintained and managed by traders/residents. Planters should respect vehicle traffic clearance requirements and should be chosen and located to not impact pedestrian traffic and safety.
Water Sensitive Urban Design (WSUD)

Localised passive irrigation using surface stormwater run-off should be integrated into new street tree and garden bed planting. The wide pedestrian priority streets presents opportunities for the use of more permeable surfaces. Where topography, drainage and stormwater catchment allows, rain gardens and bioretention tree pits should be incorporated. Passive irrigation can also be achieved by means of porous paving in combination with structural soil.

Garden Beds

The SPSP presents opportunities for integrating garden beds into the streetscape design. Planting design should assist with the legibility of street typology and as such, species which contribute to the character of each street should be selected. Appropriate garden bed scale, available space and existing site conditions, such as solar access and drainage, should also be considered. Irrigation to garden beds should be considered on main streets such as Puckle Street and Alexandra Avenue, including underground rainwater tanks for irrigation.

FIGURE 5: TREE PLANTING (Refer to Section 3.2 Table 2 for tree species)
2.5 Preferred Interfaces and Setbacks

Interfaces are the physical boundaries between public and private spaces. The composition of MPAC’s interfaces must be carefully considered to provide a sensitive transition to the low-scale residential uses in the periphery of the activity centre boundary and to design streetscapes that are attractive, vibrant, and support increased pedestrian/cyclist activity.

The preferred interface opportunities proposed on the map will be negotiated on a site by site basis.

Note: all preferred residential interfaces and setbacks will be included in the Activity Centre Zone.

Streetscape Setbacks
The streetscape ground floor setbacks are potential public realm opportunities and, depending on the location, are proposed for:

- Footpath widening
- More and larger tree planting, including green relief areas
- Greater flexibility in the configuration of street furniture, bicycle infrastructure and on-street car parking

Residential Interfaces
Residential interfaces are proposed in the MPAC: Built Form document and are required to improve the amenity (include minimising issues of overshadowing and overlooking) and visual built in the residential periphery. They are proposed to be achieved by:

- Providing ground floor landscaping
- Creating pedestrian links
- Reducing the rear street wall height. Based on the MPAC: Built Form document, the street wall heights are proposed to be reduced by two storeys at the rear.

Enhancing the public realm in this way presents various opportunities to improve lineability, as well as the viability and commercial opportunity in MPAC.

Footpath widening
- More and larger tree planting
- Greater flexibility in the configuration of street furniture, bicycle infrastructure and on-street car parking

FIGURE 6: PREFERRED INTERFACES AND SETBACKS
3. DESIGN ELEMENTS
3.0 Overview

This section provides guidelines for the design of permanent standard streetscape elements and materials. It is envisaged MPAC will exhibit a consistent design language and materiality. Streetscape design through a cohesive activity centre approach will reduce visual clutter and eliminate unnecessary items such as excessive signage through planning and coordination. The design and materiality of the streetscape will be simple, robust, versatile yet elegant, with layers of vibrancy added through street activities and events.

Each street treatment within MPAC may have some variation from the set of overall street language and materiality to allow for a level of variety, diversity and identity without compromising the overall cohesion. However, consistency should be sought for each stretch of street and customised treatments may be considered as a secondary layer in certain strategic locations on a case-by-case basis. These locations may typically include pedestrian nodes such as shared areas, raised pedestrian crossings and pocket parks. These treatments should be designed to complement the underlying standard streetscape treatment and materiality of MPAC as a whole.

The proposed streetscape upgrades and open space within the Activity Centre will require a higher level of maintenance. Council’s maintenance plan and resourcing should be periodically reviewed to reflect the proposed streetscape upgrade works and open space provisions to ensure an adequate level of maintenance is allowed for.
3. Material

Kerb and Channel
Throughout Inner MPAC and key zones such as Civic Triangle and Transport Plaza Zones, kerbs should be 300mm wide sawn bluestone with no mortar butt joint. Channels are to be bluestone pitchers. Below Table 1 and Figure 7 outlines the materiality.

In this document when concrete kerb and channel is suggested and bluestone kerb and channel currently existing, retention of bluestone should be considered on case by case basis.

<table>
<thead>
<tr>
<th>Material</th>
<th>Applied Streets/Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sawn bluestone kerb and</td>
<td>• Puckle Street</td>
</tr>
<tr>
<td>sawn bluestone channel</td>
<td>• Holmes Road</td>
</tr>
<tr>
<td></td>
<td>• Mt Alexander Road and Pascoe Vale Road within Civic Triangle and Junction Plaza</td>
</tr>
<tr>
<td></td>
<td>• Margaret Street within Station Plaza</td>
</tr>
<tr>
<td></td>
<td>• Kellaway Avenue south</td>
</tr>
<tr>
<td>Sawn bluestone kerb and</td>
<td>• Hal Street</td>
</tr>
<tr>
<td>three pitcher channel</td>
<td></td>
</tr>
<tr>
<td>Sawn bluestone kerb and</td>
<td>• Homer Street</td>
</tr>
<tr>
<td>two pitcher channel</td>
<td>• Alexandra Avenue</td>
</tr>
<tr>
<td>Sawn bluestone kerb and</td>
<td></td>
</tr>
<tr>
<td>one pitcher channel</td>
<td>• In principle, the rest of the streets in Inner MPAC will have one pitcher channel.</td>
</tr>
</tbody>
</table>

Drainage Grates
Should drainage grates be required within footpath paving, it should be stainless steel heel guard grate.

Pedestrian Crossings
Raised pedestrian crossings are featured throughout MPAC. They facilitate safe pedestrian crossing points and act to calm traffic. They are typically located where the inner MPAC streets intersect the MPAC loop as well as at strategic crossing points.

Raised pedestrian crossings are typically paved in 250x250 sawn bluestone vehicle grade paving with pitch kerb ramps. Bluestone pitch kerb channels should have sawn top at crossing points for smooth pedestrian circulation surface. Road marking paint over sawn bluestone surfaces should be avoided. Where zebra crossings are required, white granite mosaic as an alternative integrative solution should be considered.

Paving
Refer to Table 2 in the following page for material and standards of footpath paving.
**TABLE 2: FOOTPATH PAVING MATERIAL**

<table>
<thead>
<tr>
<th>Category</th>
<th>Spaces</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Pedestrian Thoroughfare</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Puckle Street</td>
<td>The pedestrian realm of main streets and key pedestrian zones within MPAC will be 1000x600mm sawn bluestone paving similar to the City of Melbourne standard footpath paving. 250x250mm vehicle grade sawn bluestone should be used where a crossover is required with a transition line perpendicular to the kerb. Pram ramps in bluestone paving should also be bluestone with white granite trolley pavers.</td>
</tr>
<tr>
<td></td>
<td>Hall Street</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Homer Street</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ecorange Street</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Holmes Road (MPAC portion)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alvanera Avenue</td>
<td></td>
</tr>
<tr>
<td><strong>Secondary Pedestrian Thoroughfare</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pratt Street (south)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stirling Street (south)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Young Street</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eldy Street</td>
<td></td>
</tr>
<tr>
<td><strong>Key Pedestrian Nodes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Heart of MPAC (Puckle, Hall and Homer Street) shared area.</td>
<td>Key pedestrian nodes that form the Heart of MPAC will be typically a shared area arrangement. These spaces may be paved either in 500x1000mm or 250x250mm sawn bluestone pavers with continuous 300mm wide bluestone kerb (just flush for shared area arrangements). 250x250mm pavers will be used where vehicular traffic is allowed for. Paving inserts or patterning will be considered by introducing bluestone pavers of varying size or finish, or an additional material such as pre-cast concrete, setts or recycled brick that complements bluestone to highlight and define the space. Preference is for the private shopping arcade that connects these spaces to have continuous floor treatment to footpath.</td>
</tr>
<tr>
<td></td>
<td>Pratt Street north shared area</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pratt Street and Young Street intersection shared area</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shuter Street north shared area</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alvanera Avenue shared area</td>
<td></td>
</tr>
<tr>
<td><strong>Civic Triangle</strong></td>
<td>Mt Alexander Road including the central medians and western footpath</td>
<td>The pedestrian realm in the Civic Triangle will feature 500x1000mm sawn bluestone paving. This treatment will apply to the portion located within the Civic Triangle.</td>
</tr>
<tr>
<td></td>
<td>Kellar Avenue</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pascoe Vale Road</td>
<td></td>
</tr>
<tr>
<td><strong>Transport Plazas (Junction and Station Zones)</strong></td>
<td>Margaret Street</td>
<td>The pedestrian realm in Transport Plaza Zones will both have 600x1000mm sawn bluestone paving. Highlights and detail design to these two spaces should correspond with each other. The treatment applies to the portion located within the Transport Plaza Zones of the indicated streets.</td>
</tr>
<tr>
<td></td>
<td>Mt Alexander Road</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Norwood Crescent South</td>
<td></td>
</tr>
<tr>
<td><strong>MPAC Loop and Vehicular Circulation Routes</strong></td>
<td>Taylor Street</td>
<td>The pedestrian realm in key vehicular circulation routes as well as in streets that have not been identified above are predominantly asphalt. Certain locations such as bus stops may feature bluestone paving. Key vehicular circulation routes will have the Council standard concrete kerb and channel with exceptions to key locations identified earlier. The assignment and materiality of these inserts will be consistent throughout MPAC.</td>
</tr>
<tr>
<td></td>
<td>Margaret Street</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Moove Street</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gladstone Street</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mt Alexander Road</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pascoe Vale Road</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aurora Vale Road</td>
<td></td>
</tr>
</tbody>
</table>
3.2 Tree Planting

Street Trees
Street trees will be the major defining element for the street network hierarchy as well as a design tool setting a spatial structure for future pedestrian-friendly street environments.

Continuous and consistent tree planting for each street, in terms of both species and detailing, will consolidate a distinctively green character in MPAC.

Tree species for each street have been determined in the SPSEP based on multiple factors such as existing species, available space, street character and hierarchy, colour and seasonal interest, desired effect such as wind mitigation, resilience to a changing climate, ecological and species diversity and low allergen. A mix of native and exotic species are proposed to create diverse and resilient streetscapes while balancing the aforementioned factors.

Tree Size
New tree planting should be of advanced size in order to fast-track the establishment of the centre's character. 100L tree stock should be sourced for street planting as a standard. Early procurement to secure established stock, where possible, should be considered.

Tree Pit Detail
Tree pit detailing will be consistent through MPAC. The following standard will apply to tree pit details:

- Tree pit in bluestone paving - 150mm wide sawn bluestone edging with mitred corners.
- Tree pit in asphalt - 150mm wide sawn bluestone edge with mitred corners or galvanised steel angle edging.

Where opportunities exist, include tree trenches and use of structural soil to ensure an adequate volume of soil is available for tree roots. Tree trenches where multiple trees share large soil volume are typically considered more space efficient than providing individual soil space for each tree. These trenches will incorporate structural soil to support pedestrian paving and encourage healthy root growth below ground. Consideration should be given for permeable paving solutions above tree trenches structural soil as well as within the Tree Protection Zone of existing trees for increased water and air supply to root space. Passive irrigation measures should also be incorporated for efficient stormwater use and improved tree health.

Tree Plant Spacing
In principle, tree planting will be at grade. Tree plant spacing should be determined by considering each street character and scale, including the size and form of nominated species into consideration. As a bottom line, tree planting will aim to achieve continuous canopy cover at 80% mature canopy width expected for the species in cultivation. For example, the canopy width of Platania x acanthifolia (London Plane) at maturity is expected to be 15m. 80% of this is 12m. To achieve a continuous canopy cover of 12m diameter canopy, plant spacing will be at approximately 10m. Accordingly, smaller canopy trees will be planted in closer spacing.
### Site Condition

Tree plantings are affected by numerous below and above-ground factors such as under and above ground services, building awnings, business signage, lighting, car parking, access requirements, and turning vehicle clearances.

Generally, undergrounding of overhead electrical wires is recommended within MPAC with priorities given to the following streets:
- Hall Street
- Holmes Road
- Shuter Street
- Young Street
- Margaret Street in between Puckle Street and Homer Street
- Alexandra Avenue
- Mt Alexander Road within the Civic Triangle

In addition to new tree plantings associated with major streetscape works, tree planting will occur by:
- Introducing kerbs at intersections to create space for tree planting.
- Introducing tree planting between on-street parking bays.

### Species Selection

#### TABLE 3: TREE SPECIES SELECTION IN MPAC

<table>
<thead>
<tr>
<th>Area</th>
<th>Street Names</th>
<th>Tree Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPAC Loop</td>
<td>Gladstone Street</td>
<td>Corymbia citriodora &quot;Quercus&quot; (Dwarf Lemon Scented Gum) to central median</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lophostemon confertus (Brush Box) to both sides</td>
</tr>
<tr>
<td></td>
<td>Margaret Street at Moorea</td>
<td>Angophora costata (Smooth-barked Apple)</td>
</tr>
<tr>
<td></td>
<td>Ponde Train Station node</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Margaret Street between</td>
<td>Corymbia citriodora &quot;Quercus&quot; (Dwarf Lemon Scented Gum) to eastam verge</td>
</tr>
<tr>
<td></td>
<td>Homer Street and Taylor</td>
<td>Lepisostigma sp. (Crisp Myrtle) to westam verge</td>
</tr>
<tr>
<td></td>
<td>Street</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Killaway Avenue</td>
<td>Angophora costata (Smooth-barked Apple)</td>
</tr>
<tr>
<td></td>
<td>Taylor Street</td>
<td>Angophora costata (Smooth-barked Apple) to southern verge</td>
</tr>
<tr>
<td></td>
<td>Eddy Street</td>
<td>Lophostemon confertus (Brush Box) to northerm verge</td>
</tr>
<tr>
<td></td>
<td>Moore Street</td>
<td>Corymbia citriodora &quot;Quercus&quot; (Dwarf Lemon Scented Gum)</td>
</tr>
<tr>
<td></td>
<td>Ascott Vale Road and Preece</td>
<td>Lophostemon confertus (Brush Box)</td>
</tr>
<tr>
<td></td>
<td>Vale Road</td>
<td></td>
</tr>
<tr>
<td>Inner MPAC</td>
<td>Puckle Street</td>
<td>Acer freensani jeffersoni &quot;Autumn Blaze&quot; (Autumn Blaze Maple)</td>
</tr>
<tr>
<td></td>
<td>Hall Street</td>
<td>Acer negundo (Box Elder)</td>
</tr>
<tr>
<td></td>
<td>Homer Street</td>
<td>Lophostemon confertus (Brush Box), Corymbia citriodora &quot;Quercus&quot; (Dwarf</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lemon Scented Gum) to western portion that is part of the loop</td>
</tr>
<tr>
<td></td>
<td>Evesage Street</td>
<td>Ficus hirsutii (Hi's Weeping Fig)</td>
</tr>
<tr>
<td></td>
<td>Holmes Road</td>
<td>Acer freensani jeffersoni &quot;Autumn Blaze&quot; (Autumn Blaze Maple)</td>
</tr>
<tr>
<td></td>
<td>Pratt Street</td>
<td>Hymenosporum flavum (Native Frangipani)</td>
</tr>
<tr>
<td></td>
<td>Shuter Street</td>
<td>Jacaranda microphylla (Jacaranda)</td>
</tr>
<tr>
<td></td>
<td>Young Street</td>
<td>Tektiaropsis jasminoides (Water Gum)</td>
</tr>
<tr>
<td></td>
<td>Aspen Street</td>
<td>Hymenosporum flavum (Native Frangipani)</td>
</tr>
<tr>
<td></td>
<td>Market Lane</td>
<td>Hymenosporum flavum (Native Frangipani)</td>
</tr>
<tr>
<td>MPAC East</td>
<td>Alexandra Avenue</td>
<td>Corymbia citriodora (Lemon Scented Gum)</td>
</tr>
</tbody>
</table>
TREE SPECIES EXAMPLES
3.3 Street Furniture

Council has a standard suite of street furniture for consistency throughout the municipality. This robust and simple suite of furniture complements overall streetscape and open space design while satisfying operational requirements. In principle, street furniture should be a part of the holistic streetscape design and provide design responses sensitive to its context.

Furniture placement should not obstruct other street elements such as the clearance requirements of service assets, pedestrian circulation space, footpath tripping zones, vehicle swept paths, and on-street parking bays.

Custom design furniture may be introduced to new public open spaces as an integrated design element complementing the particular design and location. The design of these elements should be simple, elegant, and must complement the overall streetscape materiality and Council’s standard furniture suite.

**Seats**

The placement of seating should be considered to coincide with pedestrian nodes, tree shades, and entries to community services, such as medical facilities. As a guide, seating will be provided at approximately 500m intervals on main streets within MPAC.

**Bike Hoops**

Stainless steel bike hoops are to be installed along the footpaths and in public spaces in groups.

**Bins**

Stainless steel bins are to be installed in strategic locations in proximity to seating and public open spaces. Graphic sleeving on rubbish bins are recommended as seasonal and/or temporary installations.

**Bollards**

Bollards are to be installed sparingly. Where introduction of bollards is necessary, 100mm diameter brushed stainless steel tube bollard with flat top is the preferred product.

**Fences**

In principle, introduction of fencing and barriers such as kerbside fencing, chain bollards and cafe screens are discouraged as they obstruct pedestrian permeability.

**Public Toilets**

In principle, it is not recommended to erect standalone public toilets on streets. This preference is for toilets in public buildings to be made available for public use.
3.4 Public Lighting

External public lighting for MPAC will be simple, refined and elegant, and designed to meet Australian Standards as well as Council's Sustainable Lighting Guidelines.

Key pedestrian nodes and public open spaces may feature special lighting to highlight the space.

**Street Lighting**

Street lighting should provide a safe, welcoming backdrop to night time activity in the street. A new Council standard suite of energy efficient LED lighting fixtures, incorporating a simple and timeless design will be introduced in MPAC. This will replace existing Council owned pole lights. For streets where Council and Jemena owned lightings co-exist, it should be considered that all street pole lighting be replaced with the MPAC suite for consistency. Lighting suite replacement and potential installation of new electrical meter and conduits may require an approval from Jemena.

The MPAC standard lighting suite can be installed with multiple mounting options to cater for the different street conditions. Mounting option is to be selected on case by case basis, however consideration should be given for consistency (each street should have a consistent mounting option as a principle) and to make the lighting fixture discrete during the day. The MPAC street lighting suite includes NEMA 7-pin connector to allow for smart street infrastructure and dimmable driver. The pole will have sockets to attach flags that will be used for occasions such as public events. Flags on light pole will naturally be lit at night time under street lights and will add to its visibility.

Regardless of mounting option, a consistent mounting height of 5.5m should be achieved within MPAC.

All components of the MPAC street lighting suite are painted in matt black and must be placed with a consistent setback from the face of the kerb (typically at 500mm). Light pole locations will be considered so it does not inhibit pedestrian movement or create uncomfortable glare into private residential windows. It is recommended lighting poles on streets allow mounting of signage in order to reduce overall amount of poles which will contribute to clutter on footpath.
Laneway Lighting
Preferred laneway and narrow street lighting fixtures would be either wall mounted or category arrangement to avoid poles becoming obstacles in spaces that are already constrained at the ground level. Laneways also provide opportunities for distinctive and eclectic feature lighting to reflect their intimate character, as well as site specific art-based lighting installation projects.

Feature Lighting
Feature lighting may be introduced in some of the key pedestrian nodes and public open spaces within MPAC. They attract people, navigating them to discover that with a fresh perspective, familiar public spaces are transformed into something entirely new. In principle, feature lighting will show a simple, elegant design, striking a balance with other public lit spaces within MPAC to complement the overall centre. A preference is given for indirect lighting so light sources are not visible to avoid glare. The shadows and effect of lighting to create a dramatic night time atmosphere should also be considered.

Building Illumination
Future lighting arrangements should avoid the over illumination of building façades and limit building illumination to a handful of key buildings within MPAC, such as the Clocktower. Pole locations must be carefully considered so they will not obstruct the daytime presentation of heritage and landmark buildings.
3.5 Signage

MPAC will be easily navigated on foot with a cohesive streetscape structure underpinned by a strong street hierarchy legible through materiality and scale. Wayfinding signage is recommended to be kept to a minimum within MPAC.

Design preference for wayfinding and/or centre signage would be for innovative, subtle and integrated outcomes that depart from conventional signage design consisting of signage board on a pole, pillar or entry gate/entrance.

Wayfinding Signs

The standard Council wayfinding signs may be located in strategic locations to provide baseline wayfinding information. Signage placement should be kept to a minimum and respect heritage and landmark building facades. Where possible, they should be mounted onto other utility poles such as lighting and traffic poles to reduce clutter on the footpath.

Precinct Markers

It is recommended that precinct markers be introduced instead of vertical signage to highlight threshold into the Inner MPAC. These may be expressed as paving inserts at key entries, for example, at the east and west ends of Puckle Street or at Transport Plazas.

MPAC Wifi and Digital Infrastructure

It is recommended that free public will be available throughout Inner MPAC. This will create opportunities for digital infrastructure such as interactive maps, smart parking, digital signage and art.

Footpath Trading Delineation Markers

Footpath trading areas will be delineated by the use of Council standard stainless steel disks. Refer to the Footpath Trading Policy for further information.

Footpath Trading Signage and Furniture

Signage and furniture associated with footpath trading should not obstruct circulation space or interfere with the wellbeing of street planting. The look and feel of the signage and furniture must complement the overall character of the streetscape.

Any future footpath trading policy should complement and enhance the visual aesthetics of MPAC and respond to the pedestrian-friendly proposals of the PSCP.
3.6 Public Art and Activation

Public Art
Temporary and permanent public art installations are encouraged in key strategic locations. This may include key pedestrian nodes such as public open spaces and plazas. Larreways and small streets present unique opportunities to install alternative types of public art that play with a juxtaposition of scale and character.

A planned and coordinated approach to public art in MPAC is recommended. This can be achieved through the relevant MV2040 Action Plan. This may include the identification of installation sites and a high quality curation of artworks. The chosen art should complement each site while forming a collective narrative as a cohesive whole. Preference is for works responding to the spatial quality of the location and the site specific narrative.

Integrated public art serving functional purposes such as paving inserts and custom street furniture/art may also be considered.

Activation
Larger public open spaces and main streets with shared area arrangements within MPAC have potential to hold public events and gatherings. A regular program and ongoing facilitation of annual events calendar is recommended.
3. Design Elements

3.7 Interface Design

The relationship between the built form and public realm defines the quality and character of a neighbourhood. Public realm and built form design must work together to form a cohesive activity centre structure and character.

Existing landmark buildings must be respected, supported and enhanced as key elements of MPAC’s urban fabric. New building designs must consider their spatial and character contribution in large and small scales to the adjoining public realm.

**Building Scale**
Appropriate building masses should be determined in relation to adjacent streetscapes in terms of scale, wind, sun and shade provision to complement the public realm. Within large landholdings, it is recommended new well-designed pedestrian thoroughfares be incorporated to further increase permeability.

**Building Setback**
Building setbacks for new developments should be considered to allow for potential public realm opportunities and provide a transition to the lower scale residential on the MPAC periphery.

**Rhythm**
The fine grain scale rhythm of adjoining heritage façades should be preserved in new building designs. Interface designs should be diverse and varied. It is critical that long stretches of single treatment façades or blank walls are avoided.

**Level Interface**
The ground floor level of new developments must be set flush to the adjacent street footpath level. If a difference in level is unavoidable, this level difference should be taken up inside the development’s property boundary to avoid any retaining walls at the street frontage, ensuring a flush threshold and an unbroken sidewalk in the streetscape.

**Variety and Character**
New building façade designs foster variety and complement the overall MPAC character through the discerning selection of material and detail. Façade detailing at the street level must consider the pedestrian experience and scale.

**Retain Heritage**
Heritage façades in MPAC, such as on Puckle Street, the Clocktower Centre, churches and Essendon Heritage Society buildings are local landmarks establishing MPAC’s valued character. These landmarks should be retained, respected, and enhanced by allowing them to guide the spatial character of the surrounding public realm. Location of vertical posts, including lighting in front of these façades, should complement the building. Sight lines/visors to these landmarks from various locations within MPAC should be emphasised.

**Regular Windows, Openings and Balconies**
Openings to building façades which offer glimpses into the private realm have a significant influence on public realm activation and safety. Retaining regular street openings that encourage activation through, for example, seating windows, significantly contributes to the overall vibrancy of the streetscape.
4. STREETSCAPE DESIGN
4.0 Overview

This section presents high level concept designs for the pedestrian realm of the key streets within MPAC to guide future design phases. They have considered recommendations made in the MPAC: Transport document and design principles outlined in the SPSEP.

All concept designs are indicative only and are subject to change. Changes may be required as a result of detailed design, feasibility assessments, funding and consultation with relevant authorities.

The concept designs are based on assumptions in relation to future development sites, such as building setbacks and access locations. As new developments are designed and approved, the concept designs may require adjustments.

Capital works budget and timing of each project, as well as ongoing maintenance requirements are required to be reviewed based on the principles set out in this plan.

Well resolved and high quality designs at each street scale are critical in the creation of a pedestrian-friendly environment. Each project should be guided by the SPSEP, including the transport network, street hierarchy, scale and materiality to achieve a cohesive activity centre, while seeking to celebrate and enhance individual street character. This will add to a diverse and attractive mix of streetscape and public open spaces for enhanced walkability within MPAC.

High level concepts have been developed for the following key streets:

- Pucile Street
- Hall Street
- Homer Street
- Everage Street
- Shuter Street
- Platt Street
- Young Street
- Margaret Street
- Moore Street
- Taylor Street
- Gladstone Street
- M Alexander Road
- Pascoe Vale Road
- Ascot Vale Road
- Holmes Road
- Dean Street
- Alexandra Avenue
- Kellaway Avenue

General principles are proposed for primary and secondary laneways.
4.1 Puckle Street

Puckle Street is the main shopping street within MPAC. Puckle Street is to transform into a green main street with reduced car traffic, wider footpath and a continuous tree canopy.

The central pedestrian crossing is part of the Heart of MPAC. Ensuring this central space is a generous raised shared area with adequate tree canopy cover, will reinforce the area as the pedestrian heart. This space can occasionally be closed to traffic and become a plaza space for events.

Footpath trading is encouraged for vibrant street activation. Further encouraged is additional north-south pedestrian movement through new pedestrian crossings coinciding with pedestrian nodes such as street intersections and arcade entries. These crossings will incorporate additional street furniture and increased greenery.

It is recommended signage design on awning structures be subtle and reading in colour to give a consistent street appearance and to respect the row of fine heritage façades from the Victorian-era onwards.

Existing Condition:
- Two way vehicle traffic (single lanes)
- On-street parallel parking to both sides
- No bicycle lane
- Asphalt footpath with a band of concrete paver
- Mix of stone blue stone, concrete and granite setts
- Bush kerb/channe
- Feature street lights
- Some overhead power lines
- Sparse tree planting of Acer freemanii jelfsii red
- ‘Autumn Blaze’ at kerb outstands
- Large planter pots with flowering plants
- Council street furniture suite
Proposed Design:
- Slow speed single directional (west bound) vehicle traffic shared with bike
- East bound separated cycle lane
- Widened footpath to both sides
- Rationalisation of parking bays
- Parallel parking to south side with permeable surface, structural soil and tree planting.
- Re-grading of road profile
- Some tree removal due to street re-profiling
- Continuous median tree planting in WSUD garden bed to northern side
- Encouragement of north-south pedestrian movement
- Generous central raised shared area
- Increased garden bed
- Undergrounding of overhead power lines
- Consider feature lighting to street trees

Proposed Material:
- Kerb, channel and wheel stop: Sawn bluestone
- Footpath paving: 500x1000mm sawn bluestone
- Raised crossings, shared area carriageway and crossover: 250x250mm sawn bluestone with bluestone pavers to ramp
- Street furniture: Mix of Council standard and custom
- MPAC lighting suite at mounting height of 5.5m
- Tree planting: Acer freemanii jerroandi (Autumn Blaze) to match existing condition
Concept Plan (east)

Legend:
- Sewerage
- Custom sewage
- Litter and recycling bins
- Bike lane
- Telephone box
- Post box
- Service road
- Street light
- Existing trees to be retained
- New tree planting
- One-way change from two-way
- Shared with bike
- Sewn bluestone kerb
- Seyroiled one-way cycle lane
- Raised bluestone pedestrian crossing at arcade
- WSHD continuous planting with trees and MPAG standard street lights
- 300mm wide sawn bluestone kerb
- 300mm wide sawn bluestone separator
- 300mm wide sawn bluestone kerb and channel
- Swan stoneware kerb and channel
- Removable surface, structural soil and tree planting within parking bays
- Extent of tree trench and structural soil
- Co-street parking
- Raised bluestone signalised pedestrian crossings

Scale 1:500 @ A3
4.2 Hall Street

Hall Street is one of the major east-west connectors within MPAC and directly connects Mooroolbark Train Station to the tram and bus interchange and further to Alexandra Avenue and the future Mooroolbark Racecourse development. This plan envisages Hall Street to be a major pedestrian street.

Opportunity exists to create a generous (approximately 4.5m wide) footpath on the southern side of Hall Street. The existing leafy streetscape will be strengthened with further canopy tree planting combined with the provision of ample seating and garden beds throughout.

Footpath trading, particularly outdoor dining, is encouraged to build on the existing character and trend.

The central pedestrian crossing is part of the Heart of MPAC, along with Puckle Street pedestrian crossing. By making this central space a generous raised shared area with tree canopy the pedestrian heart is being reinforced. This space can occasionally be closed to traffic and become a plaza space for events.

Existing Condition:
- Two way vehicle traffic (single lanes) to eastern half
- One way vehicle traffic (single lane) to western half
- On-street parking (mix of angle and parallel) on both sides
- No bicycle lane
- Asphalt footpath
- Blue stone or brick kerb and channel
- Jergeria standard street lights
- Some overhead power lines
- Good canopy of existing plane trees
- Small amount of outdated street furniture
Proposed Design:
- Removal of some on-street parking
- Slow speed single directional (east bound) vehicle traffic to western half
- Two-directional vehicle traffic to eastern half
- Shared vehicle and bicycle lane
- Continuous and consistent tree canopy cover by retaining existing trees and incorporating infill planting
- Introduction of tree trench with structural soil and WSUD passive irrigation with smart sealer
- Additional building setbacks to allow for trees
- Widened footpath with improved pedestrian amenity including seating and planting
- Central raised shared area
- North-south pedestrian movement is reinforced by the provision of multiple raised crossings
- Undergrounding of power lines

Material:
- Kerb and channel: Sawn bluestone kerb and 3 pitch channel
- Wheel stop: Sawn bluestone
- Footpath paving: 600x1000mm sawn bluestone
- Raised crossings and crossovers: 250x250mm sawn bluestone with bluestone pavers to ramp
- Street furniture: Council standard suite
- Tree planting: Acer negundo (Box Elder) infill planting
- MPAC lighting suite at mounting height of 5.5m
4.3 Homer Street

Homer Street is one of the major east-west connectors within MPAC. With future major development sites facing onto this street, it has a great potential to become an active and vibrant shopping street. This plan envisions Homer Street to be a major pedestrian street.

Opportunity exists to create a generous (approximately 7m wide) footpath on a portion of the northern side of Homer Street which will allow for double row tree planting. Combined with a new row of tree planting on the southern side of Homer Street, the outlook of the street will become one of an urban forest. These evergreen dense canopy tree plantings will play a role in mitigating wind effect at the foot of new residential towers.

Footpath trading under the tree canopy and active frontage design is encouraged.

Rearrangement of the Homer Street/Eddy Street intersection creates an opportunity for a new pocket park at the north eastern corner opposite the small plaza on the southern side which has a direct link down to Hall Street.

North-south pedestrian movement is reinforced through new central raised shared area that spans over 75m.
Existing Condition:
- Two way vehicle traffic (single lanes)
- On-street parallel parking mostly to north side
- No bicycle lane
- Narrow asphalt footpath
- Concrete kerb and channel
- Mix of standard and decorative street lights
- Some overhead power lines
- Sparse deciduous tree planting of mixed species
- No seating provision
- Some Council street furniture

Proposed Design:
- Removal of on-street carpark
- Slow speed single directional (west bound) vehicle traffic to western half
- Two directional vehicle traffic to eastern half
- Shared vehicle and bike lane
- Continuous consistent tree canopy cover with double row planting on northern side where space permits
- Introduction of tree trench with structural soil and WSUD passive irrigation with smart soaker
- Additional building setbacks to allow for tree planting
- Generous width footpath with ample pedestrian amenity including seating. Consider integrated custom seating design for the northern footpath
- Central raised shared area
- Undergrounding of power lines

Material:
- Kerb and channel: Sawn bluestone kerb and 2 pitch channal
- Footpath paving: 500x1000mm sawn bluestone
- Raised crossings, shared area vehicle carriageway and crossovers: 250x250mm sawn bluestone with bluestone pavers to ramp
- Street furniture: Mix of Council standard suite and custom
- MPAC lighting suite at mounting height of 5.5m
- Tree Planting: *Lophostemon confertus* (Brush Box), *Corymbia citriodora* 'Scentsicus' (Dwarf Lemon Scented Gum) to the western portion which is part of the MPAC Loop
4.4 Everage Street

Everage Street is a secondary street connecting the main pedestrian thoroughfares of Homer Street and Hall Street. With fine grain shop fronts to the eastern facade and new shop fronts being developed on the western facade, there is potential for this street to become an attractive and desirable walking thoroughfare/destination.

On-street parking bays will be rearranged to allow for tree planting in between parking bays. Evergreen dense canopy tree planting will play a role in mitigating wind effect at the foot of new residential towers while providing amenity at the human scale.

Existing Condition:
- Two-way vehicle traffic (single lanes)
- On-street parking to east side
- No bicycle lane
- Mix of asphalt and in-situ concrete narrow footpath
- Concrete kerb and channel
- No street lights
- No overhead power lines
- No trees
- No street furniture

Concept Cross Section

Section EV01 scale 1:200 @ A4

Section EV02 scale 1:200 @ A4
Proposed Design:
- Slow speed single directional (north bound) vehicle traffic
- Shared vehicle and bicycle lane
- On-street parking rearranged to the west side
- Continuous and consistent tree canopy cover
- WSUD tree pits to inter-parking bay
- Introduction of tree trench to footpath tree planting with structural soil and WSUD passive irrigation with smart soaker
- Wider footpaths on both sides for safe and comfortable pedestrian traffic

Material:
- Kerb and channel: Sawn bluestone kerb and one pitch channel
- Footpath paving: 500x100mm sawn bluestone
- Crossovers: 250x250mm sawn bluestone
- Street furniture: Council standard suite
- MPAC lighting suite at mounting height of 5.5m
- Tree planting: Ficus alii (Hill's Weeping Fig)
Concept Plan

Legend:
- Street
- Garden
- Street lighting
- Stormwater inlet
- Sewerage
- Manhole
- Drainage
- Pedestrian crossing
- On-street parking between trees
- Raised stormwater kerb
- One-way vehicle carriageway shared with bicycle
- Raised stormwater kerb and one-pitcher channel
- Wider stormwater kerb for pathway

Scale 1:500 @ A3
4.5 Shuter Street

Shuter Street is a secondary street connecting Puckle Street and Gladstone Street.

The north section of Shuter Street intersecting with Puckle Street is proposed to be widened to accommodate two way vehicle traffic while becoming a raised shared area. Shuter Street car park is proposed to be transformed into an underground/aboveground multi deck car park and incorporate with potential public open space. Combined with the community facilities such as a childcare, Shuter Street has a potential to become a greener walking street that transitions from a major shopping street to a quieter residential street.

Existing Condition:
- Narrow two way vehicle traffic (single lanes)
- On-street parking to both sides
- No bicycle lane
- Asphalt footpath
- Basaltic paver kerb and channel
- Standard street light
- Overhead power line to the west side
- No street trees
- No street furniture

Concept Cross Section

Section SH01 scale 1:200 @ A4

Section SH02 scale 1:200 @ A4
Proposed Design:
- Carriageway widening to allow for two-way vehicle access at the Puckle Street intersection
- Raised shared area arrangement at the Puckle Street intersection
- Some tree removal at Puckle Street intersection
- Removal of on-street parking
- Slow speed two directional vehicle traffic (single lanes)
- Shared vehicle and bicycle lane
- New tree planting to allow for continuous and consistent tree canopy cover to the east side
- Introduction of tree trench with structural soil and WSUD with smart sealer
- Undergrounding of power lines is recommended but not a priority
- Consider irrigation to raised planter

Material:
- Kerb and channel: Sawn bluestone kerb and 1 pitch channel
- Shared area footpath 1000x500mm sawn bluestone
- Shared area carriageway: 250x250mm sawn bluestone
- Asphalt footpath
- Street furniture: Council standard suite
- MPAC lighting suite at mounting height of 5.5m
- Tree planting: Jacaranda mimosifolia (Jacaranda)
Concept Plan

- Widened single-way carriageway and raised Bluestone shared area
- Raised Bluestone kerbs
- Existing trees
- Existing tree to be retained
- New tree planting in low trench with structural soil and passive irrigation
- Raised Bluestone kerbs
- New tree planting in low trench with structural soil and passive irrigation
- Existing tree to be retained
- Bluestone kerbs
- Two-way Vehicle Carriageway planted with bicycle
- Two-way vehicle carriageway planted with bicycle
- Ridged kerb
- Raised Bluestone kerb and one-plug kerb channel
- Existing trees
- Refer to section and detail
- Refer to section and detail

LEGEND
- Seating
- Curbed kerb
- Litter and recycling bins
- Bicycle rack
- Telephone box
- Pedestrian
- Railway
- School light
- Existing tree to be retained
- New tree planting
- Existing tree to be removed

Scale 1:500 @ A3
4.6 Pratt Street

Pratt Street is a secondary street connecting the major pedestrian thoroughfare of Puckle Street to Gladstone Street in the south. The location of this street, intersecting Puckle Street within the Heart of MPAC makes this street one of the key thoroughfares heavily used by pedestrian traffic.

The northern section of Pratt Street intersecting Puckle Street, as well as the middle section intersecting with Young Street are proposed to be a pedestrian-friendly shared area arrangement that can be closed off for occasional events.

The southern portion of Pratt Street is under private ownership but the current car park lane acts as an informal public thoroughfare. It is recommended this connection be retained as a publicly accessible street arrangement with better considered pedestrian amenity (such as compliant footpath) to maintain the permeability within the southern portion of Inner MPAC. The thoroughfare also provides a vista from Puckle Street toward a converted church building on Gladstone Street.

Existing Condition:
- Two way vehicle traffic (single lanes)
- On-street parking on both sides on the northern half
- No bicycle lane
- Asphalt footpath on the northern half
- No footpath on the southern half
- Bluestone pitch kerbs and channel
- Council decorative lights on the northern half
- No overhead power lines
- Some trees
- Some old street furniture
Proposed Design:
- Shared area arrangement at the Puckle Street intersection
- Removal of most on-street parking
- Slow speed two directional vehicle traffic (single lanes)
- Shared vehicle and bicycle lane
- Continuous and consistent tree canopy cover
- Introduction of tree trench with structural soil and WSUD with smart soaker
- Recommendation to retain southern thoroughfare through to Gladstone Street and vistas to the converted church

Material:
- Kerb and channel: Sawn bluestone kerb and 1 plaster channel
- Shared area carriageway: 250x250 sawn bluestone
- Shared area footpath: 1000x500mm sawn bluestone
- Asphalt footpath
- Street furniture: Council standard suite
- MPAC lighting suite at mounting height of 5.5m
- Tree planting: *Hymenosporum flavum* (Native Frangipani). Remove the existing Piptar trees.
4.7 Young Street

Young Street is a secondary street parallel to Puckle Street.

Interspersed with intricate laneways and small scale retail and hospitality businesses, this street has an exciting potential to become an alternative street scene different from the main thoroughfares of Puckle Street, Hall Street and Honner Street.

Wider footpaths are proposed to allow for street activation particularly on the northern footpath interfacing the small established businesses.

Footpath trading is encouraged to bring activities on to public realm.

Existing Condition:
- One way vehicle traffic (single lane)
- On-street parking to north side
- No bicycle lane
- Mix of narrow asphalt and in-situ concrete footpath
- Concrete kerb and channel
- Standard street light
- Overhead power line
- Some trees
- No street furniture
Proposed Design:
- Slow speed one directional (east bound) vehicle traffic
- Shared vehicle and bicycle lane
- Rationalised on-street parking on the north side and inter-bay tree planting
- Wider footpath on the north side
- New tree planting to achieve continuous and consistent tree canopy cover
- Introduction of tree trench with structural soil and WSUD with smart soaker
- Additional building setbacks to southern interface allowing for safe and comfortable footpaths
- Undergrounding of power line is recommended but not a priority

Material:
- Kerb and channel: Sawn bluestone kerb and 1 pitch kerb
- Shared area carriageway: 200x200 sawn bluestone
- Asphalt footpath
- Street furniture: Council standard suite
- MPAC lighting suite at mounting height of 5.5m
- Tree planting: Tristania prolixa (Water Gum)
4.8 Margaret Street (Between Homer and Pucilla Streets)

The southern portion of Margaret Street between Homer Street and Pucilla Street is at the cross road of multiple modes of transport and forms the western entry to inner MPAC.

It will become part of the MPAC Loop where vehicle traffic from Holmes Road is diverted to as well as an important part of the Station Plaza Zone.

The street is proposed to be of a high quality civic nature. This is in terms of scale and materiality lined with large majestic street trees.

The potential future redevelopment of the train station, grade separation and associated public spaces around the station could present further opportunities for improved urban design outcomes and should be coordinated with the streetscape design to form an integrated Station Plaza Zone.

Existing Condition:
- Two way vehicle traffic (single lanes)
- Some on-street parking on both sides
- No bicycle lane
- Asphalt footpath
- Bluestone pedestrian kerb and channel
- Concrete kerb outstands and islands
- Mix of standard street light and Council decorative lights
- Some overhead power line
- Some street trees
- Some old street furniture

Proposed Design:
- Two directional vehicle lanes
- Removal of on-street parking
- Separate bicycle lanes on both sides painted on the road surface
- Continuous and consistent large tree canopy cover
- Introduction of tree trench to footpath tree planting with structural soil and WSUD with smart seaker
- Undergrounding of power line
- Widen footpath on station frontage allowing for trees and a station plaza

Material:
- Kerb and channel: Sawn bluestone kerb and channel
- Footpath paving: 500x1000mm sawn bluestone
- Crossovers and raised crossings: 260x250mm sawn bluestone
- Street furniture: Council standard suite
- MPAC lighting suite at mounting height of 5.5m
- Tree planting: Angophora costata (Smooth-barked Apple)
4.9 Margaret Street (Between Homer and Taylor Streets)

The northern portion of Margaret Street, in between Homer Street and Taylor Street, is currently a small scale residential street.

This area is designated to become part of the MPAC Loop which will act to divert vehicle traffic from inner MPAC. It is also identified as part of a potential broader bicycle network route running in the north-south direction along the Craigieburn rail corridor.

Future potential level crossing removals will present further opportunities for improved urban design outcomes.

Existing Condition:
- One way vehicle traffic (single lane)
- On-street parking on the eastern side
- No bicycle lane
- Asphalt footpath
- Concrete kerb and channel
- Standard street light
- Overhead power line on the eastern side
- Some small street trees on the western side
- No street furniture

Proposed Design:
- One directional (north bound) vehicle traffic (single lane)
- Shared north bound bicycle lane
- Separate south bound bike lane at footpath level
- On-street parking bays to the west side with inter-bay tree planting
- Undergrounding of power line is recommended to allow for compliant bicycle lane and footpath on the eastern side

Material:
- Kerb and channel: Concrete
- Asphalt footpath
- Street furniture: MVCC standard suite
- Tree planting: Corymbia citriodora ‘Scentious’ (Dwarf Lemon Scented Gum) on the eastern side. Retain the existing Lagerstroemia sp. (Crepe Myrtle) trees on the western side

Concept Cross Section

Concept Section MA02 scale 1:200 @ A4
Concept Plan

Legend:
- S Eyedesign
- Concrete paving
- Bicycle path
- Bicycle box
- Post box
- Bulb
- Street light
- Existing trees to be retained
- New tree planting
- Existing trees to be removed

New tree planting in WSUD pit in between parking bays
Concrete kerb and channel
Separate one-way traffic in southbound

Scale 1:500 @ A3
4.10 Moore Street

Moore Street, between Puckle Street and Gladstone Street, is designated to become part of the MIPAC Loop acting to absorb vehicle traffic diverted from inner MIPAC. It is also identified as part of broader bicycle network route running north-south along the Craigieburn rail corridor.

Future potential level crossing removal will present further opportunities for improved urban design outcomes.

**Existing Condition:**
- Two way vehicle traffic (single lanes)
- On-street parking on the eastern side
- No bicycle lane
- Asphalt footpath on the eastern side only
- Concrete kerb and channel
- Overhead power line on eastern side
- Some street trees
- Standard street lights on the eastern side
- No street furniture

**Proposed Design:**
- Two directional vehicle lanes
- Retention of on-street parking with additional inter-bay tree planting
- Separate bicycle lanes on both sides painted on the road surface
- Undergrounding of power line is recommended but not a priority

**Material:**
- Kerb and channel: concrete
- Footpath paving: asphalt
- Street furniture: Council standard suite
- Tree planting: Corymbia citriodora ‘Scentous’ (Dwarf Lemon Scented Gum) where space allows

**Concept Cross Section**

**Typical Cross Section scale 1:200 @ A4**
4.11 Taylor Street

Taylor Street, between Margaret Street and Mt Alexander Road, is designated to become part of the MPAC Loop acting to absorb vehicle traffic diverted from inner MPAC.

To build on the existing stand of mature trees on the north side, further planting of majestic large canopy trees is proposed consistent treatment for the MPAC Loop.

Existing Condition:
- Two way vehicle traffic (single lanes)
- On-street parking on both side
- No bicycle lane
- Mix of asphalt and in-situ concrete footpath
- Concrete kerb and channel
- Overhead power line on the northern side
- Established Lophostemon confinis (Brush Box) on the northern side
- Standard street lights on northern side
- No street furniture

Proposed Design:
- Two directional vehicle lanes between Mt Alexander Road and Eddy Street
- One directional vehicle lane between Eddy Street and Margaret Street
- Removal of on-street parking from the southern side between Mt Alexander Road and Eddy Street
- Separate bicycle lane on both sides painted on the road surface between Mt Alexander Road and Eddy Street
- Retain existing trees with infill planting of continuous and consistent large canopy trees on the southern side of the footpath
- Introduction of tree trench to footpath tree planting with structural soil and WSUD with smart Soaker
- Additional building setbacks to allow for trees
- Undergrounding of power line is recommended but not a priority

Material:
- Kerb and channel: concrete
- Footpath paving: asphalt
- Street furniture: Council standard suite
- Tree planting: Angophora costata (Smooth-barked Apple) to southern verge, Lophostemon confinis (Brush Box) to northern verge
4.12 Gladstone Street

Gladstone Street is designated to become part of the MPAC Loop acting to absorb vehicle traffic diverted from inner MPAC. Further planting of majestic large canopy trees is proposed. This is the consistent treatment for the MPAC Loop.

Existing Condition:
- Two way vehicle traffic (single lanes)
- On-street parking on the eastern side
- No bicycle lane
- Asphalt footpath
- Mix of concrete and bluestone pitch kerb and channel
- No overhead power line
- Central planting median with handful of small trees
- Mixed species street trees on both sides in inconsistent tree pit detail. The dominant tree species is Lophostemon confertus (Brush Box)
- Standard street lights on the eastern side
- No street furniture

Proposed Design:
- Two directional vehicle lanes
- Retention of on-street parking and inter-bay tree planting
- Bicycle lane on both sides on both sides painted on the road surface with 0.5m painted buffer zone between on-street parking bays and cycle lanes
- Widened extensive WSUD central median to allow for continuous large canopy tree and understorey planting
- Additional building setback for future development to allow for increased pedestrian and bicycle amenity

Material:
- Kerb and channel: concrete
- Footpath paving: asphalt
- Street furniture: Council standard suite
- Tree planting: Corymbia citriodora ‘Scentuous’ (Dwarf Lemon Scented Gum) on the central median. Lophostemon confertus (Brush Box) to footpath and inter-parking bays as per existing.
4.13 Mt Alexander Road

Mt Alexander Road, between Taylor Street and Puckle Street, is designated to become part of the MPAC Loop acting to absorb vehicle traffic diverted from inner MPAC. It serves an important role as a part of the Civic Triangle as a foreground to the Clocktower Centre, Anglican Church, Moonee Ponds Police Station, Sam Merrifield Library and the Essendon Historical Society, some of which are heritage buildings.

It is proposed that this portion of Mt Alexander Road be of a high quality civic nature in terms of scale and materiality. The southern portion of the existing central median with canopy tree planting will become an increased major public open space within the Civic Triangle. It is envisaged that the whole street width acts as part of Civic Triangle through the use of consistent materiality and treatment.

Existing Condition:
- Two-way vehicle traffic (3-5 lanes)
- Indented on-street parking on the eastern side
- Over 20m wide central median fountain plaza and parking
- No bicycle lane
- Bus stops to the western side
- Mix of asphalt and bluestone footpath
- Mix of concrete and bluestone kerb and channel
- Overhead power line on the western side
- Plane trees in the central median and the western footpath and mixed tree species (for example Palm and Oak) in the eastern footpath
- Mix of Jamena standard streetlights and Council decorative lights in the Clocktower frontage and bus interchange
- Old Council standard street furniture including kerb side barrier fence in several styles.

Proposed Design:
- Separate bicycle lanes on both eastern and western sides.
- Removal of the southern half of parking in the central median and transformation to new public open space
- Retain existing trees with infill planting for continuous and consistent tree canopy cover
- Undergrounding of power line
- Improved pedestrian crossing including direct crossing from Hall Street to Alexandra Avenue
- Opportunity for an improved and extended public open space with a civic nature in the central median strip

Material:
- Kerb and channel: Swan bluestone kerb and channel
- Footpath paving: 500x1000mm sawn bluestone
- Crossovers: 250x250 sawn bluestone
- Street furniture: Council standard suite
- MPAC lighting suite at mounting height of 5.5m within the Civic Zone
4.14 Pascoe Vale Road

Pascoe Vale Road is a major vehicle connector that stretches north-east of MPAC.

While this street functions as a major vehicular connector and hosts a tram line, it also services pedestrian traffic to Queens Park, the crown jewel in the municipality.

It is recommended that separate bicycle lanes on both sides of the street be incorporated within the road reserve and extended onto Pascoe Vale Road past the MPAC boundary.

Existing Condition:
- Two-way vehicle traffic (single lanes)
- Two direction tram line shared with vehicles
- On-street parking on both sides
- Narrow footpath at the Clocktower
- No bicycle lane
- Mix of asphalt and concrete footpath
- Mix of concrete and bluestone pitch kerb and channel
- Overhead power line on both sides and tram wire
- Some street trees
- Jimena standard street lights
- No street furniture
- Steel kerbside barrier fencing at tram station east of the Clocktower
- Inactive street interface to the buildings on the western side

Proposed Design:
- Separate bicycle lane to both sides painted on the road surface. Southbound only between Killarney Avenue and the Mt Alexander Road intersection.
- Undergrounding of overhead powerline in Civic Triangle
- Removal of kerbside barrier fencing
- Install tree planting to achieve continuous canopy cover

Material:
- Kerb and channel: Sawn bluestone kerb and channel within Civic Triangle. Concrete kerb and channel to the rest. Bluestone pitch kerb and channel at Queens Park as existing
- Footpath paving: 100x500mm sawn bluestone within Civic Triangle. Asphalt to the rest.
- 250x250mm sawn bluestone to crossovers within bluestone footpath within Civic Triangle
- Street furniture: Council standard suite
- Tree planting: Lophostemon confertus (Brush Box)
4.15 Ascot Vale Road

Ascot Vale Road is a major vehicle connector stretching south-west of MPAC.

While this street functions as a major vehicular connector with a tram line, it also services pedestrian traffic.

It is recommended that separate bicycle lanes on both sides of the street be incorporated within the road reserve and for this to continue onto Ascot Vale Road past the MPAC boundary.

Existing Condition:
- Two-way vehicle traffic (single lanes)
- Two direction tram line shared with vehicle
- On-street parking on both sides south of Gladstone Street
- Narrow footpath
- No bicycle lane
- Mix of asphalt and concrete footpath
- Concrete kerb and channel
- Overhead power line on the eastern and western sides
  and tram wire
- Some street trees
- Jemena standard street lights
- No street furniture
- Steel kerbside barrier fencing at the Mt Alexander Road
  intersection
- Inconsistent and inactive street interfaces adjoining buildings
- Residential interface to properties south of Gladstone Street

Proposed Design:
- Separate bicycle lane to both sides
- Promotion of active interfaces adjoining buildings
- Undergrounding of power line is recommended but not a
  priority
- Removal of kerbside barrier fencing
- Increased tree planting where possible

Material:
- Kerb and channel: Concrete
- Footpath paving: Asphalt
- Street furniture: Council standard suit
- Tree planting: Lophostemon confertus (Brush Box)
4.16 Holmes Road

The Holmes Road shopping strip stretches to the western side of Puckle Street. It is a main entry way for vehicle and bicycle traffic to MPAC from the western side of the municipality which includes the Maribyrnong River precinct.

The Holmes Road treatment is proposed to have a level of continuation from Puckle Street while still functioning as a main traffic entry point.

Footpath trading is encouraged for vibrant street activation. It is also recommended that signage design on awning structures be subtle and receding in colour to give a consistent street appearance, that respects the row of Victorian-era heritage facades.

The potential removal of on-street car parking for bicycle lanes will be considered in line with future demand for car parking.

Future level crossing removal will present further opportunities for improved urban design outcomes.

Existing Condition:
- Two way vehicle traffic (single lanes)
- On-street parallel parking to north side
- No bicycle lane (sharrow)
- Asphalt footpath
- Concrete kerb and channel
- Jemina standard street lights
- Overhead power line on north side
- No trees
- Some old Council standard street furniture

Proposed Design:
- Retention of two way vehicle traffic (single lanes)
- Shared vehicle and bicycle lane
- Retention of on-street parking bay numbers
- Inter parking bay tree planting in WSUD pit
- Undergrounding of power lines
- Kerb outstands with tree planting in garden bed and raised east-west pedestrian crossing to the side street intersections
- Introduction of planter pots where space permits

Material:
- Kerb and channel: Sawn bluestone
- Footpath paving: 500x1000mm sawn bluestone
- Street furniture: Council standard suite
- Planter pots: as per existing Puckle Street pots
- MPAC lighting suite at mounting height of 5.5m
- Tree planting: Acer freemanii f. dissecta (Autumn Blaze Maple) to continue from Puckle Street
4.17 Dean Street (Between Mt Alexander Rd and McPherson Street)

Dean Street stretches from the eastern side of Puckle Street. It is a main entryway for vehicle and bicycle traffic to MPAC from the eastern side of the municipality.

It is recommended that separate bicycle lanes on both sides of the street be incorporated within the road reserve. This is to align with the street arrangement of Dawson Street in Moreland into which Dean Street connects with further east.

Existing Condition:
- Two-way vehicle traffic (single lanes)
- Slip turn left lane at the Mt Alexander Road intersection
- On-street parking on southern side
- No bicycle lane
- Mix of asphalt and concrete footpath
- Concrete kerb and channel
- Overhead power line on northern side
- No trees close to Mt Alexander Road intersection
- Jamuna standard street lights on northern side
- No street furniture
- Steel kerbside barrier fencing to the southern side at Mt Alexander Road intersection

Proposed Design:
- Separate bicycle lane on both sides painted on the road surface
- Building setback on south side to gain width for bicycle lane and tree planting at Mt Alexander Road intersection
- Undergrounding of powerline is recommended but not a priority
- Remove kerbside barrier fencing

Material:
- Kerb and channel: concrete
- Footpath paving: asphalt
4.18 Alexandra Avenue

Alexandra Avenue is identified as a major pedestrian connector between the future Moonee Valley Racecourse development and the Inner MPAC, connecting directly through to Moonee Ponds Train Station via Hall Street.

Opportunity exists to create a green boulevard with a generous footpath on the southern side of Alexandra Avenue. Extensive large canopy tree planting is recommended on both the northern and southern sides of the street combined with the provision of ample seating and garden beds throughout.

Footpath trading, particularly outdoor dining, is encouraged to build on the existing character and trend.

Existing Condition:
- Wide one way vehicle traffic (single lane)
- Paid on-street angle parking on both the northern and southern sides of the street
- No bicycle lane
- Narrow concrete footpath
- Bluestone pitch kerb and channel
- Jemena standard street lights
- Overhead power line on the northern side
- A few street trees
- No street furniture

![Concept Cross Section](image_url)
Proposed Design:
- General removal of on-street parking from the southern side
- Angle parking to north side with permeable surface
- Slow speed single directional (east bound) vehicle traffic
- Shared vehicle and bicycle lane
- Continuous and consistent larger canopy tree planting on both sides of the street to create a boulevard outlook
- Introduction of tree trench with structural soil and WSUD with smart soaker
- Additional building setback on south side to allow for existing tree retention
- Generous width footpath on the southern side with ample pedestrian amenity including seating and planting
- Consider irrigation to raised planter
- Consider underground rain water tank for irrigation use
- Central raised shared area
- Undergrounding of overhead power lines

Materials:
- Kerb and channel: Sawn bluestone kerb and 2 pitcher channel
- Wheel stop: Sawn bluestone
- Footpath paving: 500x1000mm sawn bluestone
- Raised crossings and crossings: 250x250 sawn bluestone with bluestone pavers to ramp
- Street furniture: Council standard suite with custom furniture at selected area
- Tree planting: Corymbia citriodora (Lemon Scented Gum)
- MPAC lighting suite at mounting height of 5.5m
4.19 Kellaway Avenue

Kellaway Avenue is part of the Civic Triangle north of the Civic Centre. While it is part of a greater vehicle connector linking Taylor Street and Wilson Street, it plays an important role for the pedestrian realm connecting Queens Park to Civic Triangle, and to the Inner MPAC.

Opportunity exists to create a wider central median with tree planting that brings the tree canopy of Queens Park in to Civic Triangle and to provide refuge for pedestrian crossings.

Proposed Design:
- General removal of on-street parking from the northern side
- Retention of two directional vehicle traffic
- Separated eastbound bike lane to south side, Shared eastbound bike lane and footpath to northern side
- Continuous and consistent larger canopy tree planting on widened central median
- Improved and safer pedestrian crossing including central median refuge
- Undergrounding of power lines

Material:
- Kerb and channel: Sawn bluestone kerb and channel to the southern side
- Relain bluestone pitch kerb and channel to Queens Park side
- Southern footpath paving: 500x1000mm sawn bluestone
- Street furniture: Council standard suite
- Tree planting: Angophora costata (Smooth-barked Apple)
- MPAC lighting suite at mounting height of 5.5m in central median

Existing Condition:
- Two way vehicle traffic (single lane)
- Continuous on-street parking and bus stop on the northern side
- On-street parking and bus stop on western end
- No bicycle lane
- Asphalt footpath
- Bluestone pitch kerb and channel to Queens Park side, concrete kerb and channel to the southern side
- Jemena standard street lights to the southern side
- Overhead power lines to the southern side
- A few street trees on southern verge
- Some seating and mixed style bollards
- Painted central median
4.20 Laneways

The intricate laneways in Moonee Ponds are wonderful assets to the urban fabric, and offer a distinct typology to the public realm in spatial character with much potential to add to the pedestrian friendly environment in terms of connectivity, amenity, diversity, heritage and human scale. With a predicted higher-density housing environment, the laneways are no longer just back-of-house access ways. It is envisaged that more and more buildings and businesses will be addressing onto the laneways and the laneway itself will play an increased role as a part of the open space network that naturally infers and champions human scale and shared area arrangement.

The SPSP aims to revitalise and reinforce the laneway network as key catalysts encouraging business activation as well as private developments that harness human scale and attractive built form. This adds to the attraction of MPAC as a major activity centre.

In general, laneways should be a thoroughfare. It is encouraged that all laneways within MPAC be reconnected as complete linkages and eliminate dead-ends which presents safety issues. Additional new laneway or walkway connections are recommended typically through large landholdings to contribute to the finer grain pedestrian network of inner MPAC.

The following pages outline design guidelines for primary and secondary laneways within inner MPAC. Other MPAC laneways, which are mostly in outer MPAC, are currently typically servicing the rear of single dwelling properties. These land uses may well change in the future which may necessitate laneway upgrades however at this point, revatisation of these laneways are of lower priority when compared to the inner MPAC laneways.

Renaming of laneways to give each lane way its own identity and address is recommended.

FIGURE 8: LANEWAY NETWORK AND HIERARCHY
PRIMARY LANEWAYS

Primary laneways run in an east-west direction, parallel to the main streets in MPAC. These laneways are the backbones of the MPAC laneway network and will have a continuous and consistent design treatment throughout consisting of the highest materiality (natural stone paving from wall to wall).

Other recommended features include:

- Sawn top bluestone pitch or 250x250mm sawn bluestone paving to central 3m width (carriageway width).
- Pedestrian zone is between carriageway paving and building facade. 100x100 mm sawn bluestone sets paving in this zone for a scale contrast, vehicle route delineation and articulation of clean edges. Minimum 600mm from 3m carriageway zone should be kept clear of obstacles to allow for turning vehicle overhang however, outside of this zone it can include items such as seating and planter pots.
- Central drainage channel created with three pitchers. Where sawn bluestone is used as paving, channel shall be created 250x250mm with sawn bluestone.
- Where kerb is required, install 300mm wide sawn bluestone kerb.
- Seek design solution to avoid installation of bollard as much as possible. If installation of bollard is necessary, install MPAC standard dia.100mm stainless steel tube bollard.
- Retain and enhance heritage red brick walls facing laneways.
- Preference for lighting is to be a crenary arrangement, lighting fixture should be hung at a consistent height of 5m clearance from ground level.
- Achieve consistent design logic and materiality throughout each laneway.
SECONDARY LANEWAYS

Secondary laneways typically run in a north-south direction and provide connections from the main streets to primary laneways. They are a collection of shorter length laneways which present an opportunity for a variation in design details to express its own identity, while respecting the common laneway scale and character within MPAC as a whole.

Other recommended features include:

- Retain existing bluestoneehler paving. Consider introducing sawn top bluestone paver to part or whole width of laneway for DDA compliance.
- Where existing paving is not bluestone, introduce asphalt paving wall to wall with three pitch concrete drain channel.
- Where a kerb is required, install 300mm wide sawn bluestone kerb.
- Avoid installation of bollards as much as possible. If installation of bollards is required, install MPAC standard Dia 100mm stainless steel tube bollard.
- Retain and enhance heritage red brick walls facing laneways.
- Preference for lighting is to be wall mounted or a catenary arrangement. Lighting fixture should hang at a consistent clearance height of 5m above ground level. For laneways not accessible for vehicles, fixture height should be above hand’s reach.
- Achieve consistent design logic and materiality throughout each laneway.
Laneway Buildings Interface

Use and design of the building interfaces within the laneway presents an important influence to a laneway’s spatial character and quality.

Design guidelines are as follows:

- Properties facing laneways are encouraged to have their own address on laneways. Rename laneways to create their own identity.
- Promote small scale businesses, retail and creative studios to Infract / Interface with laneways.
- Greenery improves microclimate and amenity. Introduce drain garden, window planter boxes, pot plants and climbing plants to provide greenery where space is limited for tree planting.
- Encourage the shared area arrangement of laneways. Kerbstones at building edges can eliminate the necessity of installation of bollards.
- Encourage building facade design to open onto laneways by introducing doors and windows, as well as through permeable, warm and tactile facade treatments.
- Encourage parking structures to not locate on the ground floor facades.
- Incorporate and design roof terraces and balconies to add to the laneway’s character and passive surveillance.
- Design out the requirement of bollards by avoiding above head structures within 5m from paving level.
- Respect the human scale of laneways by enhancing the existing intimate and intimate spatial quality.
- Respect and resonate with laneway materiality and heritage. Typical heritage laneway material in MPAC is bluestone pitch paving and red brick walls. Bluestone and recycled red brick are two key material in the MPAC’s laneway facades that is encouraged to be incorporated in future developments.
- Maintain solar access to laneways where possible.
- Design vehicle infrastructure such as garage entries in ways that contribute to the vitality of pedestrian friendly laneway.
MOONEE PONDS ACTIVITY CENTRE
PUBLIC OPEN SPACES

City of Moonee Valley
# Table of Contents

1. Background .................................................................................................................. 2
2. Vision .......................................................................................................................... 3
3. Expected change and growth ..................................................................................... 4
4. Delivering new public open space ............................................................................. 5
   4.1 MPAC: Built Form ................................................................................................. 6
   4.2 MPAC: Streetscapes recommendations .................................................................. 10
   4.3 MPAC Public Open Spaces recommendations ....................................................... 10
   4.4 Open Space Strategy ......................................................................................... 15
5. Directions and design principles .............................................................................. 15
   5.1 Privately-owned land ......................................................................................... 15
   5.2 Council-owned land ............................................................................................ 16
1. Background

Moonee Valley City Council (Council) has prepared this report to outline the additional public open space that is required in the Moonee Ponds Activity Centre (MPAC). The scope of this report is to:

1. Consider the open space required to service the future forecast population of MPAC
2. Identify gaps in the open space network within the activity centre
3. Identify opportunities for an improved open space network
4. Make recommendations as to where and how to implement potential new open spaces.

1.1 Why is open space needed?

Open space is important due to its contribution to health and wellbeing, social cohesion, economic performance and environmental health. MPAC is experiencing an increase in higher-density residential living and with the influx of people, the streets and public spaces of MPAC will need to become the place of respite and the ‘backyard’ for many.

Council has developed the MV2040 Strategy (2018), the long-term plan to improve the health, vibrancy and resilience of the city over the next two decades. MV2040 contains five themes – Fair, Thriving, Connected, Green and Beautiful – that address key issues and objectives across the municipality. Each theme includes a series of strategic directions, targets, objectives and actions.

The Beautiful theme seeks to encourage a beautiful city that celebrates its identity, heritage and open space. It contains Strategic Direction 20: A city in a beautiful landscape setting. The target under this Strategic Directions is: We achieve a connected network of high-quality open space that is appropriate to the needs of our community.
Objectives and actions to deliver Strategic Direction 20 are directly sourced from MV2040 and are as follows:

20.1 Provide open spaces to meet the needs of the community:
   20.1.1 Opportunity to strategically acquire land for open space to ensure equity of access
   20.1.2 Promote the health and wellbeing benefits of connection to open space and nature
   20.1.3 Promote structured and unstructured play for all ages and abilities, including developing
       spaces that support safe and independent play and learning
   20.1.4 Upgrade open spaces to be multi-programmable, reflecting the needs of a diverse
       community
   20.1.5 Protect public open space from encroachment of development
   20.1.6 Prepare and implement master plans to support the open space network

2. Vision

MV2040 includes a vision and a series of implementation initiatives for each of Moonee Valley’s 13
neighbourhoods. In relation to open space, it is envisioned that by 2040 the Moonee Ponds
neighbourhood will:

   • be an attractive, cosmopolitan city centre that fosters creativity and imagination
   • enjoy high-quality spaces for events and activities
   • boast a variety of resilient and vibrant green spaces, including a new open space at Moonee Valley
     racecourse.

The implementation initiatives as they relate to open space in MPAC include:

   • Redevelop the Civic Triangle
   • Acquire land for new and/or expanded areas of public open space
   • Beautify and green Puckle Street and the wider Moonee Ponds Activity Centre
   • Create a green boulevard on Alexandra Avenue to visually connect the racecourse and the main
     part of the activity centre.

These implementation initiatives are included in Council’s Long Term Capital Works Plan (to 2040).
3. Expected change and growth

Moonee Ponds is expected to undergo significant growth in the period to 2040. A large proportion of this growth will be accommodated in MPAC and the redeveloped Moonee Valley Racecourse. Development in these areas is expected to be in the form of higher-density apartments.

As Moonee Ponds changes and grows, positive actions are required to upgrade existing open space assets and provide additional open space to maintain the role it plays in the liveability and health of residents.

The Moonee Valley Open Space Strategy (2009) identifies additional open space requirements across the municipality to 2020.

The residential population of MPAC is expected to increase from approximately 3,500 people to between 10,800 and 11,600 people between 2018 and 2040, more than tripling its population (page 32 Moonee Ponds Activity Centre: Employment and Floor Space, 2019)

89% to 95% of the forecast population increase for the Moonee Ponds neighbourhood is expected to be accommodated within the bounds of the activity centre.

This statistic poses three priorities:

1. New and expanded open space to cater for the increased number of residents
2. Changes and improvement to the quality of existing open space to cater for different usage types and intensity
3. Improvements and greening of streets to provide links to destinations, including the open space network.

Creating new public open spaces within MPAC is a priority for Council. The following table, outlines the range of potential open space that could be required to accommodate the projected scale of population growth within MPAC:

<table>
<thead>
<tr>
<th>Estimated projected residential population sourced from: Moonee Ponds Activity Centre: Employment and Floor Space document</th>
<th>Open space provision per person</th>
<th>Additional open space needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2sqm</td>
<td>21,600 to 23,200sqm</td>
<td></td>
</tr>
<tr>
<td>5sqm</td>
<td>54,000 to 58,000sqm</td>
<td></td>
</tr>
</tbody>
</table>
4. Delivering new public open space

In December 2016, MPAC was announced as part of the State Government’s Activity Centre Pilot Program to review heights in the Activity Centre Zone. The MPAC project has subsequently evolved into a comprehensive review of the form, function, use and character of the activity centre. This has been guided by the vision for a healthy city articulated in MV2040. The Moonee Ponds Activity Centre: Built Form and the Moonee Ponds Activity Centre: Streetscapes and Public Spaces documents form an integral part of this review. Both documents provide strategic directions for current and future public open space within MPAC.

The hierarchy for open space in Moonee Valley is based on the Open Space Strategy (2009), which determines classification of space based on its size, location and intended purpose.

<table>
<thead>
<tr>
<th>Open space</th>
<th>Size</th>
<th>Distance requirements</th>
<th>Purpose of open space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional</td>
<td>Unlimited</td>
<td>No specific distances</td>
<td>Primary purpose caters to a broader Melbourne-wide population.</td>
</tr>
<tr>
<td>Neighbourhood</td>
<td>min 3 hectares*</td>
<td>Located within 2 kilometres of all dwellings.</td>
<td>Primarily provides facilities that attract visitors from Moonee Valley, rather than a local or neighbourhood focus.</td>
</tr>
<tr>
<td></td>
<td>30,000sqm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neighbourhood</td>
<td>min 1 hectare</td>
<td>Located within 500 metres safe walking distance from all dwellings.</td>
<td>Provides for Neighbourhood use within walking distance of home with a range of facilities on the larger area of land.</td>
</tr>
<tr>
<td></td>
<td>10,000sqm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
At the time of the Open Space Strategy (2009), it was noted that there was a distribution of 25sqm per person in the suburb of Moonee Ponds.

It must be also noted that there is currently no open space provision within the activity centre, with the only significant open space being Queens Park, which is located outside the boundary of the activity centre. Queens Park is of regional significance and attracts visitors beyond the immediate area. The public open space proposed for the Moonee Valley Racecourse precinct will provide a local provision of open space, based on its size and intended population catchment.

4.1 MPAC: Built Form

The MPAC: Built Form (2019) document identifies existing public open space provision in MPAC, as being insufficient to support the expected significant population growth and development intensification. This is consistent with the Moonee Valley Open Space Strategy (2009).

There is currently no public open space within MPAC. Queens Park is located immediately to the north and offers significant amenity to residents and visitors. It is, however, difficult to access from the majority of the MPAC due to heavily trafficked streets and limited crossing points.

This lack of public open space impacts the types of social activities that can be supported in the centre. As the number of people living and working in the centre increases, the lack of green spaces will become even more acute.
The report highlights the importance of larger development sites within the activity centre in delivering the strategic objectives for MPAC. Large sites within MPAC offer the most suitable locations for additional open space (see Figure 1). The MPAC: Built Form document also states that the opportunity to deliver parks of a reasonable size can only occur on existing privately owned sites.

Figure 1 - Large development sites (Source: MPAC: Built Form, 2019)

Delivering public open space on private land is common practice that ensures open space delivery increases as population increases. The development at 40 Hall Street and the Moonee Valley Racecourse site have committed to delivering public open space. An additional four sites have been identified in the MPAC: Built Form document that would be suitable for the delivery of a new public open space - these are identified in Figure 2.
The provision of public open space on large development sites, would be negotiated with landowners during an application process. Open space can be provided as part of a Clause 53.01 Open Space Contribution. Furthermore, sites publicly owned by Council or State Authorities have been identified to be repurposed as public open space. These are identified in Figure 2.

Consideration needs to be given to the specific location of the public open space on the sites relative to connections and urban structure as a connected and choreographed sequence that contributes to MPAC’s identity and character.
Figure 2 – Opportunities to deliver public open space (Source: MPAC: Built Form, 2019)
4.2 MPAC: Streetscapes recommendations

Council has prepared the MPAC: Streetscapes and Public Spaces Plan (2019) to guide the creation of an attractive, green and vibrant public realm catering for future growth while still maintaining elements of what is loved about the activity centre.

The plan identifies important existing and potential new public plaza spaces and streets within the activity centre. In particular, it identifies the shortage of open space within MPAC and provides design direction on preferred public plaza locations as well as proposed improvements to street designs.

The plan reiterates that MPAC currently provides limited public open space opportunities. To further cater for the forecast increase in population, a range of types and sizes of new public open spaces or plazas is recommended to be delivered through the centre. These spaces will become pedestrian destinations to stop, rest and play while further establishing a stronger sense of place.

4.3 MPAC Public Open Spaces recommendations

In summary, potential new public open space has the ability to be incorporated as part of development on large sites and by repurposing existing public land (see Figure 3), as recommended in the MPAC: Built Forms report. It has also been identified in the MPAC: Streetscapes and Public Spaces Plan to deliver plazas associated with the streetscapes of the activity centre. These spaces will be progressively realised subject to future car parking demands and consultation as well as other factors such as timing, budget, and negotiations with key stakeholders.

The locations of potential new public open spaces have been selected based on multiple factors such as solar access and shade, proximity to key pedestrian nodes including shopping streets and public transport hubs, as well as current use and ownership of the identified land.

Even distribution of public open spaces throughout MPAC is sought. These will be linked by multiple routes of pedestrian thoroughfares. The ultimate scenario aims to have public open space roughly distributed within 1-2 minutes (150m) walking distance from each other.
Figure 3 – Potential locations for new public open spaces.
Providing new public open space within the context of an existing activity centre is challenging, the following approach has been undertaken to seek new open spaces within MPAC:

1. Provide a series of diverse open spaces throughout the centre, ranging from plaza, small local links, small local parks and local parks.
2. Where possible repurpose Council and State Government land into public open space.
3. Work with landowners and seek contributions from large development sites within the Activity Centre when applicable.

<table>
<thead>
<tr>
<th>1. Moonee Ponds Train Station</th>
<th>2. Moonee Ponds Junction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classification: Plaza</td>
<td>Classification: Plaza</td>
</tr>
<tr>
<td>The Moonee Ponds Train Station upgrade presents an opportunity for improved public realm outcomes. A generous and green station plaza would play a vital role as a public transport entry into Moonee Ponds. Council will advocate for solutions that will deliver the broadest of public benefits for the community.</td>
<td>A new public open space incorporated with the Junction will anchor the eastern edge of MPAC and act as a connector across Pascoe Vale Road through to the Moonee Valley Racecourse precinct.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Mt Alexander Road Triangle Site</th>
<th>4. Pratt Street Park (private land)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classification: Small Local</td>
<td>Classification: Local</td>
</tr>
<tr>
<td>This site has been acquired by Council and is earmarked as a green relief space with activities within the overcrowded Junction area.</td>
<td>An underground car park with opportunity for new public open space, ideally at ground level, is proposed. Possibilities also include a multipurpose civic/market plaza or skate park.</td>
</tr>
</tbody>
</table>
### 5. Shuter Street Park
**Classification:** Small Local

An underground/aboveground multi-deck car park incorporating a new public open space is proposed. This park would be highly accessible from the main shopping streets in the Inner MPAC and it is envisaged as a people’s space that includes shelter, screening, ample seating and a play space complementing the adjacent child care facility. Should it be an underground structure, it should be designed with areas of deep soil plantings to accommodate large trees. Existing established trees on the road edge are recommended to be retained.

### 6. Homer Street Pocket Plaza
**Classification:** Plaza

Small pocket plaza with raised tree planting and seating is proposed.

### 7. North-South Link Plaza between Homer and Hall Streets
**Classification:** Plaza

An extensive community plaza is proposed. This should feature high quality paving, terraced seating, feature planting and lighting, and a community space.

### 8. Moonee Ponds Racecourse Park (private land)
**Classification:** Local

The Moonee Ponds racecourse redevelopment will accommodate a range of open spaces with a minimum total area of 7,000m², including a 5,000m² open space as indicated.

### 9. Margaret Street Micro Space
**Classification:** Plaza

There is an opportunity to create a small pocket seating space within the existing streetscape under existing mature trees on the east side of Margaret Street opposite the Moonee Ponds Train Station. It is further suggested the adjacent sites be identified to accommodate potential open space for fresh food and/or a speciality community market.

### 10. Eddy Street Park (private land)
**Classification:** Small Local

Opportunity for a new public open space, ideally at ground level, is proposed. Existing established trees on the road edge are to be retained.
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Mt Alexander Road Central Median Civic Space</td>
<td>12. Des Nunan Park</td>
</tr>
<tr>
<td>Classification: Small Local/Plaza</td>
<td>Classification: Small Local</td>
</tr>
<tr>
<td>In partnership with the State Government and other key stakeholders, Council should investigate the improvement of the existing bus interchange and car parking areas to establish a new public open space. This will form a new frontage and interface to the Moonee Ponds Civic Centre.</td>
<td>The current car park on Hall Street is recommended to be transformed into a green park.</td>
</tr>
<tr>
<td>13. St Aidan’s Lane Pocket Plaza</td>
<td>14. Ascot Vale Road Pocket Park</td>
</tr>
<tr>
<td>Classification: Plaza</td>
<td>Classification: Small Local</td>
</tr>
<tr>
<td>A small node plaza in Penny Lane is proposed. This would create a focal point in MPAC’s intricate laneway network.</td>
<td>A pocket park on Ascot Vale Road will provide a green focal point and a much needed open space at the end of Gladstone Street.</td>
</tr>
<tr>
<td>15. Mt Alexander Road Park (private land)</td>
<td>16. Homer Street/Hall Street Plaza</td>
</tr>
<tr>
<td>Classification: Small Local</td>
<td>Classification: Plaza/Small Local Link</td>
</tr>
<tr>
<td>Opportunity exists to include a public open space development as part of the redevelopment of this large land holding.</td>
<td>Opportunity exists to include a public open space at key pedestrian entry points as part the redevelopment of this large land holding. Preference is for these spaces to directly address</td>
</tr>
<tr>
<td>17. Phillips Arcade Pocket Park (private land)</td>
<td></td>
</tr>
<tr>
<td>Classification: Small Local Link</td>
<td></td>
</tr>
<tr>
<td>A small green park at the end of Phillips Arcade will create a green pocket within MPAC’s intricate laneway network. A glimpse of greenery from Puckle Street will entice and draw pedestrians to the laneway.</td>
<td></td>
</tr>
</tbody>
</table>
4.4 Open Space Strategy

The *Open Space Strategy (2009)* provides information regarding open space in activity centres. Research into the use of open space suggests that well maintained open space with natural features such as plants, grass and trees is more highly used in inner urban locations. With the intended expansion of the residential population in activity centres, there will be a need to provide open space with natural features near to these centres. In Moonee Valley, the small areas of open space located in activity centres are generally hard landscapes that have minimal maintenance requirements. The presence of garden beds, trees and grass in high use areas will increase the frequency of maintenance and this needs to be adequately provided for in future budgets and contract specifications for these works.

The *Open Space Strategy (2009)* is outdated and will be superseded by the comprehensive open space analysis currently being undertaken to align with *MV2040*. It is intended the findings of this analysis will inform the majority of the *MV2040 Action Plan: Beautiful*.

5. Directions and design principles

5.1 Privately-owned land

The *MPAC: Built Form* document proposes that ground floor open space comply with a certain criteria of public open space design requirements. The document recommends that in the instance public open space is proposed on private land, the responsible authority must decide where the nominated public space is appropriate as use as a public open space having regard to:

- The size of the area of land to be used for open space, on its own or in combination with adjoining land
- Whether the open space area is located at ground level (this is particularly important to provide visual and physical access to the space, in particular DDA access)
- The type of landscaping which might be provided, including whether the land is capable of supporting a large mature canopy tree(s), can incorporate sustainable water supply and reuse, and moisture retention for passive cooling. The potential to accommodate a range of (organised, unstructured and informally) recreational uses
The provision of open space would be negotiated during the application process. Clause 53.01 Public Open Space Contribution is proposed to be amended to clarify Council’s preference for land over cash for the four identified large sites in MPAC (refer to Figure 2).

5.2 Council-owned land

In line with the strategic directions of MV2040, in the instance that public open space is being acquired by Council, all of the principles indicated above are applicable with additional regard to:

<table>
<thead>
<tr>
<th>Principle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate open space is provided in proximity to Council civic and community built form to increase programming of these spaces to facilitate community based activities</td>
</tr>
<tr>
<td>Open space has the opportunity for adequate Crime Prevention Through Environmental Design (CPTED) characteristic with clear sight lines and visual and physical access</td>
</tr>
<tr>
<td>Land is identified in adopted Council policy and plans</td>
</tr>
</tbody>
</table>
- Ecological values where the site’s potential to contribute to the protection and enhancement of existing or future habitat corridors
- Site’s ability to contribute to the wider open space network including forming open space corridor links to increase walkability. This includes consideration of the other strategic planning projects in Council for future expansion of the residential population, and where it is appropriate to provide connections.
- Ability to increase urban cooling with identified sustainable water source or passive cooling through shade canopy trees
- Provision of open space as a connected series of places which encourage healthy lifestyles including: play, sitting, walking, jogging, exercising, informal games, picnicking and dog walking
Transport Review
Moonee Ponds Activity Centre

Prepared for
Moonee Valley City Council
November 2019
27075R-01C
Transport Review
Moonee Ponds Activity Centre

Document Control

Our Reference: 27075R-01C

<table>
<thead>
<tr>
<th>Issue No.</th>
<th>Type</th>
<th>Date</th>
<th>Prepared By</th>
<th>Approved By</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Draft</td>
<td>19/11/19</td>
<td>L. Fumess</td>
<td>C. Dunstan</td>
</tr>
<tr>
<td>B</td>
<td>Final Draft</td>
<td>19/11/19</td>
<td>L. Fumess</td>
<td>C. Dunstan</td>
</tr>
<tr>
<td>C</td>
<td>Final</td>
<td>19/11/19</td>
<td>L. Fumess</td>
<td>C. Dunstan</td>
</tr>
</tbody>
</table>

COPYRIGHT: The ideas and material contained in this document are the property of Traffic Group (Traffic Group Pty Ltd - ABN 32 100 481 570). Use or copying of this document in whole or in part without the written permission of Traffic Group constitutes an infringement of copyright.

LIMITATION: This report has been prepared on behalf of and for the exclusive use of Traffic Group's client and is subject to and issued in connection with the provisions of the agreement between Traffic Group and its client. Traffic Group accepts no liability or responsibility whatsoever for or in respect of any use of or reliance upon this report by any third party.
Executive Summary

This report provides a transport review to support Moonee Valley City Council’s (MVCC) proposed new planning controls for the Moonee Ponds Activity Centre (MPAC), which include the proposed Activity Centre Zone (Schedule 1) and an accompanying Parking Overlay (Schedule 1).

This report builds on a foundation of a number of transport and strategic planning studies, which have been produced by MVCC for MPAC and the City of Moonee Valley in recent years. The various strategic plans by MVCC articulate a clear objective of prioritising walking, cycling and public transport as the future of moving people within Moonee Valley and MPAC. This is the overarching objective of the recommendations in this report.

MPAC is the premier activity centre within Moonee Valley and designated for significant growth over the next 20 years. Over this timeframe, the population of MPAC is forecast to triple and the number of jobs provided is expected to double. MPAC is well connected by public transport services and is already a 20-minute neighbourhood in accordance with the definition of Plan Melbourne. Increased density within the Activity Centre provides an excellent location where sustainable transport modes can and should be prioritised over private vehicle travel.

The future Activity Centre Zone controls are recommended to include a number of specific objectives and requirements in relation to transport. A key focus of these plans is improving the walkability and cyclability of MPAC. Council has been working on Streetscape Plans to upgrade all roads within MPAC to deliver a more pedestrian and cyclist friendly environment.

To support the streetscape plans, it is recommended that the following key points be included within the Activity Centre Zone controls:

- A map that clearly defines the role of each street within the Activity Centre, to provide a tool for planning of new developments and their response to the street network. This map should also define the pedestrian and cycling networks. It is important that the streetscape plans are reinforced by the proposed Activity Centre Zone controls, so that new development does not comprise the function of each street within MPAC.

- A map that sets out where vehicle access to new development is encouraged and discouraged. This provides a framework to encourage vehicle access in locations that support the role of each street within the network and to maximise pedestrian and cyclist safety and amenity within MPAC.

- Requirements regarding the role, operation and upgrade of laneways throughout MPAC. The laneway network within MPAC (which is somewhat fragmented currently) presents the opportunity to improve pedestrian connectivity through the centre. It also has a role for rear vehicle and serving access, removing these functions from key pedestrian streets throughout the centre. The controls should improve the connectivity and functionality of the MPAC laneway network.

- Improved requirements for bicycle parking and associated facilities. In line with Council’s objective of increasing cycling within Moonee Valley, the provision of enhanced facilities...
Transport Review

Moonee Ponds Activity Centre

for cyclists within individual developments synergises with Council’s infrastructure upgrades which will prioritise cycling as a mode of transport.

A consolidated summary of all recommended transport inclusions for the Activity Centre Zone controls is provided at the Conclusions section of this report (see Section 8 on page 69).

The second part of the proposed controls is a Parking Overlay. When reviewing the proposed Overlay, it is important to recognise a 'business as usual' approach to car parking provision within MPAC is not sustainable and would undermine Council’s transport objectives for MPAC. Rising road congestion and increased development within MPAC (and Melbourne) means that traditional predict and provide approaches to car parking is not a viable option.

As the available capacity of the road network within MPAC is finite, the scale of additional development to be accommodated within MPAC requires a marked shift towards sustainable transport modes. In this context, it follows that encouraging new developments to provide lower levels of car parking for private cars is a desirable and necessary outcome.

The Parking Overlay proposes that the Column B parking rates to be set as maximum parking rates for all uses listed in Table 52.06-5, with the following individual exceptions:

- Car parking rates for dwellings set at a maximum parking rate of 1.0 car space per dwelling (irrespective of dwelling size) and with no visitor parking requirement.
- The Office car parking rate is set at a maximum parking rate of 2.0 car spaces per 100m² of Net Floor Area (NFA).

The provision of maximum parking rates is specifically designed to:

- Support sustainable transport outcomes.
- Reduce future demand for private transport and consequential traffic congestion impacts.
- Remove planning barriers to the provision of low car parking.
- Provide a means to control the over-supply of car parking.
- Increase housing affordability and choice.
- Reduce red tape associated with minor planning applications triggering car parking reductions.
- Provide certainty to stakeholders, decision makers and the community with regards to car parking outcomes.
- Discourage costly (and which may also become redundant in future) car parking solutions.

The lowering of the Column B parking rates for dwellings and offices is specifically in the context that these uses are critical to the activity centre.

'Dwellings' are a key land use for the future development of MPAC. MPAC is ideally placed to accommodate dwellings with reduced car parking provision due the availability of alternative transport options, accessibility of services and local employment opportunities. That is, MPAC is already the heart of a 20-minute neighbourhood. It is also evident from a review of ABS car ownership data that the application of the minimum car parking requirements under Clause 52.06 would encourage higher car ownership levels by over-supplying car parking above the levels exhibited by existing households in this locality. The continued provision of car parking at rates higher than existing demand will not assist to reduce car ownership, or
Transport Review

Moonee Ponds Activity Centre

curtail traffic growth and congestion, and would undermine Council’s sustainable transport objectives for MPAC.

‘Office’ is a particular use that is an important target for mode shift due to its impact on the road network. Office parking is a key generator of traffic during the road network peak hours and this peak demand occurs at the peak availability of public transport services (i.e. services are at their most frequent). Importantly, office car parking generates 2 to 3 times traffic on a per car space basis during peak hour than a residential car space. The proposed maximum parking rate is a 33% reduction on the current minimum parking rate.

The Parking Overlay is also accompanied by a set of additional decision guidelines, required for when applications seek to exceed the maximum rates imposed.

The proposed amendment directly addresses issues in relation to traffic congestion through the Parking Overlay. The proposed controls are designed to support and enhance Council’s proposed streetscape upgrades throughout MPAC. Some of these issues are outside the scope of this review and the planning scheme amendment process. In particular, issues surrounding upgrades to public transport facilities or arterial road management are matters for the State Government and relevant agencies. Council’s role in these issues is one of advocacy for their implementation and as a consulting body.
### Table of Contents

1. **Introduction** ........................................................................................................................................ 9

2. **Scope of Work** ...................................................................................................................................... 9
   2.1. Reference documents .......................................................................................................................... 10

3. **Policy Context** ...................................................................................................................................... 10
   3.1. Plan Melbourne 2017-2050 .............................................................................................................. 10
   3.2. MV2040 Strategy .............................................................................................................................. 12
   3.3. Draft MPAC to 2040: Moonee Ponds Activity Centre Local Plan ......................................................... 13
   3.4. Local Planning Policies and Strategy ............................................................................................... 16
   3.4.1. Municipal Strategic Statement .................................................................................................. 16

4. **Existing Conditions** .......................................................................................................................... 17
   4.1. Study Area ......................................................................................................................................... 17
   4.2. Regional Context .............................................................................................................................. 19
   4.3. Local Context ..................................................................................................................................... 20
   4.4. Review of Transport Network ......................................................................................................... 20
   4.4.1. Road Network ............................................................................................................................ 20
   4.4.2. Public Transport .......................................................................................................................... 23
   4.4.3. Cycling Network .......................................................................................................................... 27
   4.4.4. Pedestrian Network ..................................................................................................................... 29
   4.4.5. Car Parking Conditions .............................................................................................................. 31
   4.4.6. Car Share Vehicles ....................................................................................................................... 31
   4.4.7. Review of Existing Mode of Travel within MPAC .................................................................... 32
   4.5. Future Issues ..................................................................................................................................... 34

5. **Review of Proposed Activity Centre Controls** ................................................................................. 35
   5.1. Objectives to be achieved ................................................................................................................ 35
   5.2. Precinct Wide Provisions ............................................................................................................... 36
   5.2.1. Street Network Provisions .......................................................................................................... 36
   5.2.2. Vehicle Access Management .................................................................................................... 41
   5.2.3. Laneway Provisions ..................................................................................................................... 43
   5.2.4. Bicycle Provisions ....................................................................................................................... 46
   5.3. Precinct Specific Controls .............................................................................................................. 47
   5.4. Loading and Waste Collection ....................................................................................................... 47

6. **Parking Overlay** ............................................................................................................................... 49
   6.1. Definition of Objectives ............................................................................................................... 50
   6.2. Parking Overlay Rates .................................................................................................................... 50
   6.2.1. Existing Situation ........................................................................................................................ 50
   6.2.2. Proposed Parking Overlay Rates ............................................................................................... 51
Transport Review

Moonee Ponds Activity Centre

6.2.3. Review of Adopting Maximum Rates .......................................................... 51
6.2.4. Review of the Proposed Dwelling Rate .................................................. 54
6.2.5. Comparison to other Parking Overlays .................................................. 55
6.2.6. Review of Car Ownership Levels ......................................................... 55
6.2.7. Are Dwellings Without Car Parking Acceptable in MPAC? .................... 57
6.2.8. Review of the Proposed Office Rate ..................................................... 58
6.2.9. Reduction in Traffic Impacts of New Development ................................. 60
6.2.10. The availability of convenient and efficient public transport in this area ... 61
6.2.11. The lack of impact on Public Parking .................................................. 61
6.2.12. The site's proximity to a variety of services within MPAC ..................... 62
6.2.13. Encouragement of 'local living' in this centre ...................................... 62
6.3. Parking Overlay Car Parking Rates Summary ........................................ 62
6.4. Parking Overlay Decision Guidelines ..................................................... 63
6.5. Management of Public Parking ................................................................. 63

7. Summary of Existing Issues and Challenges and Planning Response ........... 66
8. Conclusions ...................................................................................................... 69

List of Figures

Figure 1: The 20-minute neighbourhood (Source: Plan Melbourne) .................. 12
Figure 2: Extract of Access and Movement Plan from the Draft MPAC Local Plan 16
Figure 3: Moonee Ponds Activity Centre and Precincts (Source: Draft MPAC Local Plan) 17
Figure 4: Melbourne 2017-2050 Jobs and Investment Map (Source: Plan Melbourne 2017-2050) 19
Figure 5: Moonee Valley Road Hierarchy (Source: Moonee Valley Road Management Plan 2017) 21
Figure 6: Public Transport Map of Moonee Ponds and surrounds (Source: www.ptv.com.au) 24
Figure 7: Principal Public Transport Network Map (Source: Planning Schemes Online) 25
Figure 8: TravelSmart Map (Source: City of Moonee Valley website) ................. 27
Figure 9: Existing and Proposed Strategic Cycling Corridors (Source: www.arcgis.com) 28
Figure 10: Walkscore Map (Source: https://www.walkscore.com/AU-VIC/Melbourne/Moonee_Ponds) 30
Figure 11: Recommended Transport Map ....................................................... 38
Figure 12: Recommended Vehicle Access Control Map .................................. 42
Figure 13: Standard 3m-wide Laneway 90-degree Splay .................................. 44
Figure 14: Non-Standard Varied-Width Laneway Splay .................................. 44
Figure 15: Standard 3m-wide Laneway Non-Right-Angle Splay ....................... 44

List of Tables

Table 1: Summary of Public Transport Services .............................................. 25
Table 2: Journey to Work Data based on Place of Residence: 2016 Census .......... 33
Table 3: Journey to Work Data based on Place of Work: 2016 Census .......... 33
Table 4: Review of Car Ownership Data and various Parking Overlay Rates ....... 55
Table 5: ABS Car Ownership Data for other Inner Suburbs (2016 Census) ....... 56
Table 6: Reduced Office Car Parking Rates ..................................................... 99
Transport Review

Moonee Ponds Activity Centre

Table 7: Moonee Valley City Council Kerbside Road Space Hierarchy  64
Table 8: Recommended Car Parking Hierarchy  65
Table 9: Summary of Transport Challenges for MPAC  66

List of Appendices

Appendix A  Clause 52.06
Transport Review

Moonee Ponds Activity Centre

1. Introduction

Moonee Valley City Council has prepared a series of strategic plans and studies in relation to the future development of the Moonee Ponds Activity Centre (MPAC). The outcomes of this body of work are summarised within the document ‘MPAC to 2040 – Moonee Ponds Activity Centre Local Plan’. The Local Plan has been developed in line with Council’s overall strategic planning document for the municipality, MV2040 Strategy (MV2040). The Local Plan outlines a vision for the Moonee Ponds Activity Centre that is beautiful, green, easy to move around, full of life, and celebrates the heritage character of the area.

Council now proposes to implement a suite of planning controls to guide the development of MPAC in accordance with Council’s vision. These controls are in the form of an Activity Centre Zone and a Parking Overlay. The proposed planning controls will undergo a formal planning scheme amendment process in due course to incorporate them into the Moonee Valley Planning Scheme.

Traffix Group has been engaged by Moonee Valley City Council to undertake a Transport Review of the Moonee Ponds Activity Centre (MPAC) to provide recommendations for the formulation of Council’s proposed planning controls. This engagement has included detailed review of the background studies and supporting materials already prepared by Council.

This report makes recommendations regarding the transport-related elements that should be included within the Activity Centre Zone (ACZ1) and for the introduction of a Parking Overlay (Parking Overlay Schedule 2).

2. Scope of Work

This report reviews the transport engineering challenges facing MPAC and provides recommendations in regards to the new planning controls proposed that will implement Council’s vision for the Activity Centre.

In formulating the recommendations of this report, the supporting/background material already prepared by Council through numerous studies and strategic planning documents has been reviewed. The scope of this work has included a number of site inspections, various field investigations and a number of workshops with Council officers.

Our scope of work has included the following tasks:

- review of background documents and studies prepared by Council in relation to MPAC,
- review of Council policies and other relevant documents,
- site inspections of MPAC and the surrounding transportation network,
- review of supporting documentation and planning history,
- review and analysis of traffic data,
- review of car parking provision and management,
- review of bicycle and pedestrian infrastructure,
- review of car parking management and controls within MPAC,
Transport Review

Moonee Ponds Activity Centre

- attendance at a number of workshops with Council officers.

2.1. Reference documents

This report relies on the following key background documents prepared by Moonee Valley City Council and others:

- MV2040 Strategy (2018)
- MPAC to 2040 – Moonee Ponds Activity Centre Local Plan (2019)
- Moonee Valley City Council Municipal Parking Strategy (2017)
- Moonee Valley Racecourse Integrated Transport Plan (2017)
- Road Management Plan 2017-2021 prepared by Moonee Valley City Council (2017)
- Parking Plan – Moonee Ponds Activity Centre (2015)
- Draft Integrated Transport Strategy 2016-2040 Moonee Valley City Council (2016)
- Moonee Valley Walking and Cycling Strategy 2012-2022
- Moonee Valley City Council Integrated Transport Plan (2008)
- Transport Assessment, Moonee Ponds Activity Centre – Traffic Study by Cardno (2018)

3. Policy Context

3.1. Plan Melbourne 2017-2050

Plan Melbourne is a long-term vision to ensure that Melbourne grows more sustainable, productive and liveable as its population approaches 8 million. It is a long-term plan designed to respond to the state-wide, regional and local challenges and opportunities Victoria faces between now and 2050. MPAC is identified as a Major Activity Centre under Plan Melbourne.

The objectives of Plan Melbourne are supported by a series of directions, initiatives and actions. The development of MPAC relates to a range of initiatives outlined in Plan Melbourne including:

- Initiative 2.2.3: deliver housing close to jobs and transport
- Initiative 3.4.1: make neighbourhoods pedestrian-friendly
- Initiative 3.4.2: create a network of high-quality cycling links.

Apart from these initiatives, MPAC will also assist with delivering on key directions including:

- Direction 2.2: reduce the cost of living by increasing housing supply near services and public transport
- Direction 4.1: create a city of 20-minute neighbourhoods
- Direction 4.3: create neighbourhoods that support safe communities and healthy lifestyles.

Traffix Group
Transport Review

Plan Melbourne 2017-2050 (Direction 5.1) states that a 20-minute neighbourhood must:

- be safe, accessible and well connected for pedestrians and cyclists to optimise active transport.
- offer high-quality public realm and open space.
- provide services and destinations that support local living.
- facilitate access to quality public transport that connects people to jobs and higher-order services.
- deliver housing/population at densities that make local services and transport viable.
- facilitate thriving local economies.

Plan Melbourne goes on to state that:

*The 20-minute neighbourhood is all about ‘living locally’— giving people the ability to meet most of their everyday needs within a 20-minute walk, cycle or local public transport trip of their home.*

Figure 1 is an extract from Plan Melbourne which encapsulates what a 20-minute neighbourhood means.

The creation of new dwellings and employment opportunities within an Activity Centre which is highly walkable, well connected via quality public transport and bicycle facilities accords with the vision of Plan Melbourne 2017-2050 in terms of creating a ‘20-minute neighbourhood’. A 20-minute neighbourhood also means that local employment opportunities available which are well connected to public transport services. This is the vision that Council seeks to implement within MPAC.
3.2. MV2040 Strategy

The MV2040 Strategy is Moonee Valley City Council’s long-term plan for the municipality over the next two decades. This plan covers all areas of Moonee Valley and sets out a series of strategic directions for a fair, thriving, connected, green and beautiful city (the 5 key themes of this document).

Council’s vision statement from MV2040 is set out below:

In 2040 Moonee Valley is a great place to live, work and visit, strengthened by a network of 20-minute neighbourhoods. Our neighbourhoods allow all people, at all stages of life, to live locally, accessing most of their needs close to their home.

Our neighbourhoods are beautiful, sustainable and hold strong community connections which enable citizens and the environment to be healthy and resilient.

The inclusion of the principle of the 20-minute neighbourhood is a key theme of MV2040 and accords with one of the key objectives of Plan Melbourne.

The plan includes the following key strategic directions and objectives of MV2040:

**Strategic Direction 10:** A city where sustainable transport is the easy option

**Objectives:**
Transport Review

Moonee Ponds Activity Centre

10.1 Expand high-frequency public transport options
10.2 Reduces the real and perceived impediments to sustainable travel

**Strategic Direction 11:** A city with streets and spaces for people

**Objectives:**
11.1 Provide a safe and easy-to-use walking and cycling network
11.2 Provide a truly connected walking and cycling network
11.3 Manage car usage through demand management techniques
11.4 Focus on road safety

**Strategic Direction 12:** A city at the forefront of transport technology

**Objectives:**
12.1 Position of city for smarter transport connectivity

This document has had reference to these strategies and directions when making recommendations in regards to the ACZ1 and Parking Overlay proposed for MPAC.

3.3. **Draft MPAC to 2040: Moonee Ponds Activity Centre Local Plan**

The Moonee Ponds neighbourhood is expected to undergo significant growth by 2040. A large proportion of this growth will be accommodated in MPAC, including the redeveloped Moonee Valley racecourse. Council has prepared the Draft MPAC to 2040: Moonee Ponds Activity Centre Local Plan (the Draft MPAC Local Plan). This following information is derived from this draft plan that when out for information consultation in April-May, 2019. This information may be refined further in the final version of this plan, however it provides an excellent guide as to the direction of MPAC:

- **People** - In 2018 there were 3,579 people living in MPAC. This is expected to increase to between 10,800 and 11,600 by 2040 - more than tripling the current population.

- **Dwellings** —
  - The majority of new housing in MPAC is expected to be in the form of higher-density apartments.
  - In 2018 there were 1,652 dwellings in MPAC. This is expected to increase between 3,788 and 4,152 dwelling by 2040 - an almost three-fold increase.
  - In addition, the Moonee Valley Racecourse Master Plan indicates the redevelopment of the racecourse will deliver around 2,000 dwellings, reducing the pressure for new residential development within the core of MPAC.

- **Employment** - Between 2016 and 2040 employment in MPAC is forecast to increase by around 6,800 to almost 14,000 jobs - close to double. Almost 4,000 of these jobs are forecast to be in the commercial sector, representing 60 per cent of total employment in 2040.

- **Floor Space** - There is expected to be demand for over 160,000 square metres of new employment floor space between 2016 and 2040. Consistent with the current proportion of
Transport Review

Moonee Ponds Activity Centre

commercial floor space to employment floor space generally, more than half of this additional floorspace is expected to be commercial employment floor space. There is also expected to be demand for almost 35,000 square metres of retail floor space and more than 20,000 square metres of institutional floor space.

These changes ‘set the scene’ for the proposed ACZ1 and Parking Overlay controls.

Council’s vision for Moonee Ponds is that by 2040, the Activity Centre will (underline added for emphasis):

• be the premier business, civic, cultural, creative, community and entertainment destination of Moonee Valley

• be an attractive, cosmopolitan city centre that fosters creativity and imagination, which includes attractive and functional public spaces for events and activities

• be a well-connected centre with a safe and accessible public transport interchange and an excellent network of walking and cycling connection within and to other neighbourhoods

• have maximised the variety of resilient and vibrant green spaces

• have encouraged a diverse range of housing choices and affordable housing options

• have encouraged high quality architecture and design in all development

• have celebrated and protected the valued heritage qualities of MPAC

The Draft MPAC Local Plan includes the following priorities for access and movement:

Pedestrian priorities

• Connect and pedestrianise laneways creating a cohesive network for improved pedestrian permeability and urban vibrancy

• Improve pedestrian movement with shared zones at key pedestrian nodes on Pratt Street, Shuter Street, Hall Street, Puckle Street and Hornet Street

• Improve major pedestrian crossings by transforming them into ‘smart intersections

Sustainable transport

• Provide secure bicycle parking at the train station, as well as shorter term bicycle parking opportunities throughout MPAC

• Require a minimum of 1 bicycle park per dwelling in new developments

Private vehicle

• Alter car parking requirements for new developments by:
  – Requiring a maximum of 0.5 car park per dwelling
  – Changing car parking rates for all other uses depending on the requirements of the centre

• Strengthen the vehicle circulation route (MPAC Loop) to minimise the negative impact of through traffic

• Improve safety and the public realm with design treatments and by reducing speed limits within the MPAC Loop and shared zones
Transport Review

Moonee Ponds Activity Centre

- Advocate for the extension of 40km/h along Mt Alexander Rd from The Strand to Ormond Road (approach consistent with the SmartRoads and Vision Zero adopted by the Victorian Government)

Car parking
- Deliver no net loss of car parking in the activity centre
- Consolidate off-street car parking towards the periphery of the activity centre by negotiating on a site by site basis for public use car parking in private developments
- Reduce on-street, kerb side parking to improve the walking and cycling network, achieve wider footpaths, more public open space and outdoor dining opportunities.
- Install smart parking technologies to help direct motorists to more easily find an available parking spot

Public transport advocacy
- Improve bus integration within MPAC, by simplifying movements at the Junction
- Improve tram speeds and reliability by separating tram and motor vehicles along Mt Alexander Rd and Ascot Vale Rd
- Improve access to public transport for pedestrians and cyclists
- Explore the potential of Puckle Street level crossing removal to improve vehicle, cyclist and pedestrian circulation

The Draft Local Plan also includes the following transport map at Figure 2. It is recommended that a similar version of this map should be included within the ACZ1 controls (see Section 5). The recommended map is clearer translation of the original map, more closely focused on transport outcomes. The principal changes relate to removing the park areas shown (in keeping with the objective of including a transport specific map within the ACZ1 controls) and showing bicycle infrastructure, but not specific cycling treatments.
Transport Review

Moonee Ponds Activity Centre

Figure 2: Extract of Access and Movement Plan from the Draft MPAC Local Plan

3.4. Local Planning Policies and Strategy

3.4.1. Municipal Strategic Statement

The Municipal Strategic Statement (MSS) for the City of Moonee Valley is outlined in Clause 21 of the Moonee Valley Planning Scheme\(^1\). The MSS outlines the strategic visions of the municipality with regards to land use, built form, transport and environmental sustainability.

Clause 21.09 of the Planning Scheme outlines the transport related visions and objectives of the MSS, which are summarised below as follows:

- **Transport modes** – establish a road space hierarchy based on modal efficiency as follows: pedestrians; cyclists; public transport; freight; private vehicles.

- **Walking and cycling** – To increase the number of residents and visitors who walk and cycle, particularly for short trips (under 2 kilometres walk and 5 kilometres ride).

- **Public transport** – to increase the number of residents and visitors who use public transport.

\(^1\) The relevant visions and objectives from the MSS have been translated into the new PPF format and Amendment C19.3mon is currently with the Minister to consider for approval (by the time MPAC amendment goes to exhibition, C19.3mon is likely to be gazetted and new planning scheme structure established).
4. Existing Conditions

4.1. Study Area

The study area is the Moonee Ponds Activity Centre as shown in Figure 3.

Figure 3: Moonee Ponds Activity Centre and Precincts (Source: Draft MPAC Local Plan)
Transport Review

The review excludes Precinct 9 – the Moonee Valley Racecourse redevelopment (not specifically shown in the above diagram) as this area has been extensively planned as part of previous planning processes. This report has broadly considered the implications of the racecourse redevelopment when making its recommendations. Given the planning history of the racecourse, this report does not seek to review the development of this area or make changes to the approved plans for this area.
Transport Review

Moonee Ponds Activity Centre

4.2. Regional Context
MPAC is located within inner Melbourne and in close proximity to the Melbourne CBD (6km) and a number of significant Activity Centres. MPAC is directly connected to the CBD and the Footscray and Broadmeadows Metropolitan Activity Centres (MACs) via rail services (train and/or tram). The Parkville National Employment and Innovation Cluster (NEIC) is also located in close proximity to MPAC and directly connected by the Route 59 tram. MPAC’s regional context is shown in the following extract from Plan Melbourne.

Figure 4: Melbourne 2017-2050 Jobs and Investment Map (Source: Plan Melbourne 2017-2050)
Transport Review

Moonee Ponds Activity Centre

4.3. Local Context

Land use within MPAC consists of a wide variety of retail, commercial, civic, recreational, educational, residential and transport land uses. MPAC provides a full variety of everyday services including three supermarkets, banks, medical centres, retail outlets. There are a number of government and private schools around the periphery of the Activity Centre.

Key land uses within MPAC include:

- Moonee Valley Racecourse at the eastern end of MPAC
- Moonee Ponds Railway Station towards the western side of MPAC
- The Junction tram and bus interchange on Mt Alexander Road
- Moonee Ponds Central and Moonee Ponds Shopping Centre
- Kangaroo Institute Moonee Ponds
- Queens Park at the northern end of MPAC
- The Civic precinct, including Moonee Valley Council offices

At the time of writing this report, the large Caydon development in Horner Street is nearing completion. This project will provide a substantial number of new dwellings into the heart of MPAC.

The availability of these everyday services and amenities means that MPAC already meets many of the characteristics that define the 20-minute neighbourhood described in Plan Melbourne (see Section 3.1).

4.4. Review of Transport Network

4.4.1. Road Network

MPAC is serviced by a road network comprising all road types from arterial roads to laneways. The classifications of the various roads within and around the Activity Centre are set out in the following diagram, extracted from the Moonee Valley Road Hierarchy².

Mt Alexander Road, Pascoe Vale Road, Ascot Vale Road and Kellaway Avenue are designated as VicRoads arterial roads. The arterial road network provides good north-south connectivity to and through MPAC. The arterial road network meets at the Junction. The size and complexity of this intersection is a the constraint to the capacity of the local arterial road network.

Dean Street and Wilson Street are Council 'major roads' that extend east from MPAC into Brunswick and the Moreland LGA.

Holmes Road, Gladstone Street, Margaret Street, Moore Street, Taylor Street are collector roads which form a loop around MPAC and link the Activity Centre to the west and local destinations to the north and south.

Transport Review

MPAC is serviced by a network of laneways. These laneways are commonly narrow, in the order of 3m wide, providing a single traffic lane for two-way traffic flow. The majority of laneways are constructed with bluestone, though concrete and asphalt surfaces are also present. The quality of the surfaces is mixed.

The laneway network generally serves as rear vehicle access to abutting properties and generally experience low volumes of traffic and pedestrians. Many of these laneways have limitations in terms of vehicle accessibility, with dead ends and corners with limited splays being a common feature.

In addition to laneways, there is a number of pedestrian malls on private and public property connecting through MPAC. These malls serve no vehicle access function.

![Map of MPAC Boundary](image)

*Figure 5: Moonee Valley Road Hierarchy (Source: Moonee Valley Road Management Plan 2017)*

The existing road network has a number of identified high-level transport issues. In 2018, MVCC commissioned Cardno to complete a study into the operation and capacity of the intersections within MPAC, the ‘MPAC Traffic Analysis’ report. This study undertook traffic modelling of key intersections throughout the Activity Centre using SIDRA.

A number of scenarios where considered, including existing conditions, future conditions taking into account development already approved within MPAC and a development scenario that represented development within MPAC in accordance with the proposed planning controls.
Transport Review

Moonee Ponds Activity Centre

This report identified the following capacity issues with the road network:

- Under existing conditions the Moonee Ponds Junction and the intersections of Ascot Vale Road/Manlyburn Road\(^3\) and Holmes Road/Puckle Street railway crossing\(^4\) were the critical intersections within the area, operating at capacity during peak periods.

- In 2031, the Pascoe Vale Road/Wilson Road intersection would join the critical intersection list through 'background' traffic volume growth. The current critical intersections will continue to operate at or near capacity.

- In an 'Ultimate Development Scenario' which assumed full development of the Activity Centre under the Moonee Ponds Activity Centre Structure Plan 2010 (updated 2012), the report concluded that "the additional vehicle movements estimated to be generated are not capable of being accommodated on the existing MPAC precinct road network" and "in addition the operation of Mt Alexander Road (NW), Pascoe Vale Road, Dean Street, Puckle Street, Ascot Vale Road and Maribyrnong Road are expected to worsen significantly."

The above study makes various assumptions regarding the scale and intensity of new development, development timeframes, traffic generation rates of new development and general traffic growth on the road network. Some of these assumptions may be overly conservative over the longer term. The study also makes no allowance for displacement of existing traffic travelling through MPAC or suppression of traffic growth as congestion increases. In practice, people that are making the vehicle trips through the Activity Centre may either re-route or change transport modes to avoid driving to/through MPAC.

The pressure of new development will undoubtedly place additional pressure on the MPAC road network. It also needs to be recognised that the capacity of the road network is essentially finite – the ability to widen roads within MPAC to improve its capacity for any transport mode is minimal.

A likely strategy to improve the capacity of the road network is to reallocate road space to favour more efficient modes of transport. Such changes may involve public transport only lanes or car parking being removed to allow for permanent traffic lanes or new bicycle facilities. The common theme is that the number of traffic lanes able to be provided and the capacity to accommodate additional car-based vehicle movements is limited.

The limited capacity of the road network is a critical consideration in the future planning of the Activity Centre. This means that the increased levels of car parking (and resultant traffic generation) along with increased development is not sustainable in the long-term as the road network cannot expand to accommodate the additional transport demand. The solution to this issue is a greater focus on sustainable and more efficient transport modes, consistent with the objectives of Plan Melbourne.

---

\(^3\) The review also identified the Maribyrnong Road/Ascot Vale intersection as critical, but this intersection is not strictly within MPAC.

\(^4\) It should be noted that the level crossing and railway line forms a barrier to movement for vehicles, cyclists and pedestrians through the Activity Centre. This is not just in relation crossing the railway line at Puckle Street, but also the limited number of crossing points available.
Transport Review

Moonee Ponds Activity Centre

The challenges of rising transport demand also present an important opportunity to support sustainable transport outcomes. MPAC offers opportunities in the following areas:

• MPAC is well located with respect to the Melbourne CBD and other significant Activity Centres and employment generators, which are readily accessible via public transport and within cycling distance and it is not necessary to complete these trips via car.

• It provides increased housing density in an area well serviced by public transport services and providing a high level of access to everyday services, places of employment and entertainment. As such, residents within MPAC will have less need for private car trips to access everyday services or for journey to work purposes. These trips can be taken by walking or cycling. Effectively, MPAC is a ‘ready-made’ 20-minute neighbourhood and an ideal location for increased housing and employment density.

• Increased employment and retail opportunities within MPAC, a location well serviced by public transport services, provides both workers and customers the ability to visit the area without using a private car.

It is important that the new planning controls and associated infrastructure support sustainable transport choices in this context.

4.4.2. Public Transport

MPAC is well serviced by public transport services with train, tram and bus connections. Figure 6 illustrates the public transport network that services Moonee Ponds and surrounding areas. The Activity Centre is entirely within the Principal Public Transport Network map, as shown at Figure 7. Table 1 provides a summary of the connections provided by each public transport service.

MPAC is a focal point for public transport services within the municipality. It has fixed rail connections to the CBD and key Activity Centres including Footscray, Highpoint, Parkville and Broadmeadows. As such, MPAC is considered to have a high level of access by public transport services.

Public transport services within Moonee Ponds do face a number of well understood challenges:

• The Moonee Ponds Bus interchange has a significant number of shortcomings. These issues relate to its layout, capacity, operation and accessibility by passengers (including disabled passengers). It is outside the scope of this report (which is focused on the proposed Activity Centre Zone and Parking Overlay controls) to detail all of these issues or identify upgrades or alternatives. These issues are the responsibility of state agencies. We understand that an upgrade of this facility is currently being investigated by the relevant authorities in consultation with Council.

• Traffic congestion on arterial roads causes delays for on-road public transport services, particularly on Ascot Vale Road and Mt Alexander Road. Trams and buses are not provided with separate rights-of-way and are subject to general traffic congestion, particularly through the junction. These issues will only worsen over time as traffic congestion increases (irrespective of increased development within MPAC).
Transport Review

Moonee Ponds Activity Centre

- Council is actively advocating that the Puckle Street/Holmes Road level crossing be removed under the State Governments level crossing removal program. It represents an opportunity to considerably enhance the Activity Centre from a transport perspective by eliminating a key barrier to east-west movements for pedestrians and cyclists and address the capacity constraint of the Puckle Street level crossing for traffic movements. A grade separation of the railway line could also incorporate a new dedicated, off-road north-south bicycle route parallel to the railway line, which could potentially provide a safer alternative to Mt Alexander Road for cyclists. However, at the time of writing this report no plans have been announced for this project.

Addressing these three issues is outside the scope of this report. The planning and provision of public transport services and management of arterial roads is the responsibility of the State Government and associated agencies. Addressing these issues requires State Government and state level authorities to implement. The purpose of this study is to inform planning controls that encourages public transport usage and support these services as they are upgraded over time.

Council’s role in these issues is primarily an advocacy one. Council should continue to lobby the State Government and relevant agencies to address these issues.
Transport Review

Moonee Ponds Activity Centre

![Map of Moonee Ponds Area](image)

Figure 7: Principal Public Transport Network Map (Source: Planning Schemes Online)

Table 1: Summary of Public Transport Services

<table>
<thead>
<tr>
<th>Service</th>
<th>Between</th>
<th>Via</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Metropolitan Rail Services</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moonee Ponds Railway Station (Craigieburn Line)</td>
<td>Melbourne CBD &amp; Craigieburn</td>
<td>Flemington Activity Centre, Essendon &amp; Glenroy Activity Centre</td>
</tr>
<tr>
<td><strong>Tram Services</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tram Route 82</td>
<td>Moonee Ponds &amp; Footscray</td>
<td>Highpoint Shopping Centre, Maribyrnong College &amp; Footscray Activity Centre</td>
</tr>
<tr>
<td>Tram Route 59</td>
<td>Airport West &amp; Flinders Street Station</td>
<td>Essendon Fields, Keilor Road Commercial District, Mt, Alexander Road Commercial District, Royal Children’s Hospital &amp; Elizabeth Street</td>
</tr>
<tr>
<td>Tram Route 57</td>
<td>West Maribyrnong &amp; Flinders Street Station</td>
<td>Union Road Commercial District, Melbourne Showgrounds, Flemington Racecourse, Royal Children’s Hospital &amp; Elizabeth Street</td>
</tr>
</tbody>
</table>

Traffix Group

27075R-01C 25
### Transport Review

Moonee Ponds Activity Centre

<table>
<thead>
<tr>
<th>Service</th>
<th>Between</th>
<th>Via</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bus Services</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bus Route 404</td>
<td>Footscray &amp; Moonee Ponds</td>
<td>Footscray Park, Flemington Racecourse &amp; Ascot Vale Road</td>
</tr>
<tr>
<td>Bus Route 467</td>
<td>Aberfeldie &amp; Moonee Ponds</td>
<td>Ave Maria College, Marianmorg Park &amp; Holmes Road</td>
</tr>
<tr>
<td>Bus Route 472</td>
<td>Williamstown &amp; Moonee Ponds</td>
<td>Newport Commercial District, Yarraville Oval, Footscray Activity Centre, Footscray City College, Flemington Racecourse &amp; Melbourne Showgrounds</td>
</tr>
<tr>
<td>Bus Route 475</td>
<td>Moonee Ponds &amp; East Kelor</td>
<td>Penleigh &amp; Essendon Grammar, Rosehill Secondary College &amp; Mt. Alexander Road</td>
</tr>
<tr>
<td>Bus Route 476</td>
<td>Moonee Ponds &amp; Plumpton</td>
<td>Watergardens Station, Watergardens Shopping Centre, Taylors Lakes Secondary College, Kelor Downs Secondary College, Taylors Creek Linear Park, Penleigh &amp; Essendon Grammar School, Essendon Kelor College &amp; Mt. Alexander Road</td>
</tr>
<tr>
<td>Bus Route 477</td>
<td>Moonee Ponds &amp; Broadmeadows Station</td>
<td>Essendon Fields, Airport West Shopping Centre, Tullamarine Primary School, Gladstone Park, Hume Central Secondary College &amp; Broadmeadows Shopping Centre</td>
</tr>
<tr>
<td>Bus Route 483</td>
<td>Sunbury &amp; Moonee Ponds</td>
<td>Diggers Rest, Calder Park, Essendon North Primary School, Penleigh &amp; Essendon Grammar School &amp; Mt. Alexander Road</td>
</tr>
<tr>
<td>Bus Route 501</td>
<td>Niddrie &amp; Moonee Ponds</td>
<td>Essendon Kelor College, Airport West, Airport West Shopping Centre, Essendon Fields, Napier Street &amp; St. Vincent de Paul Primary School</td>
</tr>
<tr>
<td>Bus Route 504</td>
<td>Clifton Hill &amp; Moonee Ponds</td>
<td>Clifton Hill Station, Fitzroy North, Carlton North, Brunswick Road, Royal Melbourne Hospital &amp; Mt. Alexander Road</td>
</tr>
<tr>
<td>Bus Route 505</td>
<td>Melbourne University &amp; Moonee Ponds</td>
<td>Royal Parade, Melbourne Zoo, Parkville Youth Justice Precinct &amp; Mt. Alexander Road</td>
</tr>
<tr>
<td>Bus Route 506</td>
<td>Westgarth Station &amp; Moonee Ponds</td>
<td>Merri Station, Glenlyon Road, RMIT University, Brunswick Secondary College &amp; Moonee Valley Racecourse</td>
</tr>
<tr>
<td>Bus Route 508</td>
<td>Alphington &amp; Moonee Ponds</td>
<td>Alphington Station, Grange Road, Separation Street, Northcote Plaza Shopping Centre, Brunswick East, Blyth Street, Brunswick Station, Clifton Park &amp; Moonee Valley Racecourse</td>
</tr>
<tr>
<td>Bus Route 951 (NightBus)</td>
<td>Melbourne CBD &amp; Glenroy</td>
<td>Collins Street, Lonsdale Street, Flemington Road, Mt. Alexander Road, Moonee Ponds Activity Centre, Moonee Valley Racecourse &amp; Pascoe Vale</td>
</tr>
</tbody>
</table>
4.4.3. Cycling Network

The cycling network around MPAC is shown at Figure 8.

The Travelsmart map illustrates that almost all bicycle routes servicing MPAC are informal bicycle routes. These routes have minimal supporting bicycle infrastructure, usually limited to signage and in some cases sharrows. There are few routes in and around MPAC that provide dedicated or separated bicycle facilities with the exception of Mt Alexander Road and Gladstone Street. Mt Alexander Road has been identified as a key Strategic Cycling Corridor by the Department of Transport (DoT). This is shown in Figure 9.

A key issue for MPAC and Moonee Valley in general is a lack of high-quality east-west cycling routes. While Mt Alexander Road (and in the wider area, the trails along Moonee Ponds Creek and the Maribyrnong River) provides a north-south cycling route, there is no dedicated bicycle route or infrastructure in an east-west direction through MPAC.

Dedicated or separated bicycle facilities are critically important to not only improve cyclist safety, they have a significant impact on rider confidence and have a key role in encouraging more 'casual' cycling of riders of lower initial abilities to take up cycling in the first instance.

Figure 8: Travelsmart Map (Source: City of Moonee Valley website)
Transport Review

Moonee Ponds Activity Centre

Figure 9: Existing and Proposed Strategic Cycling Corridors (Source: www.arcgis.com)

Identified issues with the local bicycle network through and around MPAC include:

- A lack of dedicated bicycle infrastructure within MPAC, leading to a poor cycling environment.
- Lack of an east-west bicycle route through or around MPAC. There is also a general lack of east-west bicycle routes across the Moonee Valley LGA.
- A fragmented network of dedicated bicycle facilities, where they are provided.
- A relatively large number of bicycle hoops, however usage is very low in many areas.

Puckle Street is currently identified by the Department of Transport (DoT) as a proposed Strategic Cycling Corridor and it forms part of a link connecting Holmes Road-Puckle Street-Dean Street-Dawson Street-Glenlyon Road to provide a clear and connective east-west cycling route through Moonee Valley and Moreland. The VicRoads Traffic Engineering Manual (Vol 3), Design Guidance for Strategically Important Cycling Corridors defines a Strategic Cycling Corridor as:

Strategically important cycling corridors are a subset of the Principal Bicycle Network (PBN) and are intended to provide:

- a long-term vision for a network of safe, direct and high quality cycling corridors connecting activity centres, public transport hubs and other key locations
- a step-change in cycling facilities to encourage cycling of all ages and abilities – using a combination of high quality a) off-road paths, b) on-road separated bike lanes and c) traffic-calmed local streets

Traffic Group

27075R-01C 28
Transport Review

Moonee Ponds Activity Centre

- a focused planning and investment effort along these key corridors.

While we understand that this east-west corridor is under review, the importance of a strategic east-west cycling link through Moonee Valley at some location is readily apparent from a network perspective by examining Figure 9.

4.4.4. Pedestrian Network

MPAC has the potential to be a highly walkable area, with many everyday services, places of recreation and public transport facilities within easy walking distance. These opportunities will increase as MPAC develops.

Walkscore5 is a measure of how accessible local amenities are by walking. Scores calculated by number and distances to these amenities, with amenities that are further than a 5 minute walk providing lower scores. Walkscore classifies locations according to the following scale:

90–100 Walker’s Paradise
Daily errands do not require a car

70–89 Very Walkable
Most errands can be accomplished on foot

50–69 Somewhat Walkable
Some errands can be accomplished on foot

25–49 Car-Dependent
Most errands require a car

9–24 Car-Dependent
Almost all errands require a car

The Walkscore for Moonee Ponds as a whole suburb is 75, which is defined as ‘most errands can be accomplished on foot’. This score increases to 100 (‘walkers paradise’) for the central areas of MPAC. This is shown in Figure 10. This score is due to the density and diversity of everyday services available within MPAC.

MPAC essentially meets the criteria of a ‘20-minute neighbourhood’ already via walking. It also provides a comparable level of walkability to the Melbourne City and other inner area activity centres such as Footscray, Richmond and Brunswick.

5 https://www.walkscore.com/AU-VIC/Melbourne/Moonee_Ponds

Traffix Group
Transport Review

Moonee Ponds Activity Centre

Figure 10: Walkscore Map (Source: https://www.walkscore.com/AU-VIC/Melbourne/Moonee_Ponds)

However, the Walkscore measure does not review the physical walking environment within MPAC, i.e. the quality of pedestrian infrastructure and general pedestrian amenity. The pedestrian environment within MPAC presents a number of challenges which are summarised below:

• Significant delays to pedestrians crossing Mt Alexander Road and through the Junction. This is due to various factors including high traffic volumes, signal phasing and intersection configurations and the width of Mt Alexander Road.

• A number of missing links where pedestrian crossing points of key roads could be provided or further improved.

• Variable quality of footpath links. Many streets within MPAC include narrow footpaths of variable width and surface quality.

• A lack of pedestrian amenity in some areas, including lack of street activation, lighting, landscaping, street furniture and general attractiveness.

Traffix Group
4.4.5. Car Parking Conditions

MVCC commissioned detailed car parking surveys of MPAC by Austraffic. These surveys were completed on Tuesday 19th June, 2018 and Saturday 23rd June, 2018. The surveys were conducted between 7am-9pm at hourly intervals on both days.

These surveys included all on-street and off-street public car parking. This included a total of 1,746 car spaces. They did not include private off-street parking such as Moonee Ponds Shopping Centre.

The parking surveys revealed the following key information:

• There is a large existing supply of on and off-street car parking within MPAC.

• On-street parking within MPAC is highly controlled and managed. This includes:
  – The use of Permit Zone controls within residential streets either on a full or part time basis for residential areas around the periphery of the centre.
  – Long-term parking (Unrestricted or P parking) is in limited supply and in some areas subject to fees.
  – Parking within the commercial heart of the Activity Centre is generally limited to short-term (2P or less) parking.
  – Some peak hour No Stopping or Clearway restrictions apply to arterial roads.

• The average parking occupancy rate across MPAC was 64% (peak of 72%) of the Tuesday and 46% (peak of 55%) on Saturday.

• In common with most activity centres (of any size or in any location), car parking demand is generally higher within the core areas of the Activity Centre (in areas such as Puckle Street, Hall Street, Super Street, etc) and lower on the periphery. It is common for these core streets to be at or near capacity during business hours for long periods of the day.

• Public parking is in much lower demand during the evening (6pm onwards), with average parking rates below 40% on Tuesday and 30% on Saturday.

While the surveys did not include the private carparks at Moonee Ponds Centre or Moonee Ponds Shopping Centre, observations during our various site inspections found very high occupancies of these carparks during weekday business hours. This is consistent with the trend of the most convenient and centrally located car parking being the busiest within MPAC.

4.4.6. Car Share Vehicles

There are currently four car share vehicles located within MPAC, two each located near Moonee Ponds Station and on Mt Alexander Road near to the Council offices.

Car share vehicles provide an option for residents within the area to occasionally use a car, without the expense of owning and maintaining a vehicle themselves. This applies equally to residents without a car to those that own one car and may occasionally require access to a second.

Nearby workers can also use these vehicles for business related trips. This allows workers to use the vehicle for business instead of their own vehicle, allowing them to use alternative transport modes to travel to and from work.
Transport Review

Moonee Ponds Activity Centre

As MPAC develops, it is recommended that Council encourage the provision of on and off-site car share vehicles.

‘Off-site’ or public car share vehicles are important. These vehicles are the most accessible (being available to anyone for hire), meaning that their usage is likely to be higher than ‘privately’ located vehicles. This has benefits of advertising the service and increasing the viability of the car share vehicle (due to the higher pool of potential customers).

On-site car share vehicles have a role to play but it should be recognised that the developments they are provided within need a ‘critical mass’ of residents or workers to ensure the financial viability of the car. It is problematic from a visibility and accessibility perspective for non-occupants to find, use and access these vehicles.

4.4.7. Review of Existing Mode of Travel within MPAC

The ABS ‘journey to work’ data for the 2016 Census has been reviewed in order to assess the existing mode of travel patterns of residents and workers within MPAC. While this data is limited to journey to work trips (i.e. it does not include all trips), it is useful due to its sample size and the critical nature of travel for work trips.

Table 2 sets out the journey to work statistics based on place of residence (i.e. workers living within Moonee Ponds). The data indicates that less than half of residents within Moonee Ponds drive to work.

Table 3 sets out the journey to work statistics based on place of employment (i.e. workers within Moonee Ponds). This table identifies that alternate transport is used to a higher degree by persons working within the Moonee Ponds Statistical Area Level 2 (SA2), compared to the wider municipality. However, it is not dissimilar to the wider Melbourne metropolitan average.

We have also compared staff ‘journey to work’ data for the following place of residence and place of work locations for comparative purposes:

- Moonee Valley Suburb,
- Moonee Valley Local Government Area (LGA),
- Brunswick Suburb,
- Footscray Suburb, and
- Melbourne Metropolitan Statistical Area (MSA).

The data highlights Moonee Ponds residents and workers exhibit higher levels of sustainable transport use compared to the wider Moonee Valley LGA, particularly the level of public transport usage.

---

A separate assessment of the data for the Moonee Ponds Statistical Area Level 2 was also completed for these employees identified as ‘professionals’ and ‘clerical and administrative workers’ only. However, there was almost no statistical difference between these groups and all other workers.

Brunswick is included as it is located a similar distance to the Melbourne CBD and has similar levels of connectivity to the CBD via train and tram services as does MPAC.

Footscray is included as it as larger Activity Centre, also located at a similar distance to the Melbourne CBD.
Transport Review

However, the level of car usage by both groups is higher than in Footscray or Brunswick, even though these areas are similarly proximate to the Melbourne CBD and have convenient access to public transport services. From a geographical perspective and public transport access perspective, there is no reason why MPAC should not be able to achieve similar mode splits to Footscray or Brunswick, including a considerable higher mode share taken up by public transport, cycling and walking.

Table 2: Journey to Work Data based on Place of Residence: 2016 Census

<table>
<thead>
<tr>
<th>% mode of travel for journey to work' trip</th>
<th>Live within Moonee Ponds Suburb</th>
<th>Live within Moonee Valley LGA</th>
<th>Live within Brunswick Suburb</th>
<th>Live within Footscray Suburb</th>
<th>Live Within Melbourne MSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car as driver</td>
<td>49%</td>
<td>57%</td>
<td>32%</td>
<td>38%</td>
<td>61%</td>
</tr>
<tr>
<td>Public Transport</td>
<td>25%</td>
<td>19%</td>
<td>32%</td>
<td>36%</td>
<td>15%</td>
</tr>
<tr>
<td>Walking</td>
<td>4%</td>
<td>2%</td>
<td>5%</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>Cycling</td>
<td>3%</td>
<td>2%</td>
<td>12%</td>
<td>4%</td>
<td>1%</td>
</tr>
<tr>
<td>Other Mode (car passenger, motorcycle, taxi etc.)</td>
<td>6%</td>
<td>6%</td>
<td>5%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Other Data (worked at home, did not go to work etc.)</td>
<td>13%</td>
<td>14%</td>
<td>14%</td>
<td>12%</td>
<td>15%</td>
</tr>
</tbody>
</table>

Table 3: Journey to Work Data based on Place of Work: 2016 Census

<table>
<thead>
<tr>
<th>% mode of travel for journey to work' trip</th>
<th>Work within Moonee Ponds SA2</th>
<th>Work within Moonee Valley LGA</th>
<th>Work within Brunswick Suburb</th>
<th>Work within Footscray Suburb</th>
<th>Work Within Melbourne MSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car as driver</td>
<td>63%</td>
<td>68%</td>
<td>58%</td>
<td>63%</td>
<td>61%</td>
</tr>
<tr>
<td>Public Transport</td>
<td>12%</td>
<td>7%</td>
<td>12%</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>Walking</td>
<td>4%</td>
<td>3%</td>
<td>5%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Cycling</td>
<td>1%</td>
<td>1%</td>
<td>5%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>Other Mode (car passenger, motorcycle, taxi etc.)</td>
<td>6%</td>
<td>5%</td>
<td>6%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Other Data (worked at home, did not go to work etc.)</td>
<td>14%</td>
<td>16%</td>
<td>14%</td>
<td>12%</td>
<td>15%</td>
</tr>
</tbody>
</table>
Transport Review

4.5. Future Issues

It needs to be acknowledged that the future of transport is changing. These changes include how vehicles are operated, powered, owned and how transport systems are managed. Public awareness of these changes is also increasing.

MV2040 includes Strategic Direction 12, for Moonee Valley to be a city at the forefront of transport technology.

The exact timing and extent of the impact of these various changes is uncertain. However, it is very likely that these changes will impact transport planning significantly within the timeframe of the MPAC plan (out to 2040). The three most significant changes likely to occur are:

- Electrically powered vehicles are likely to supersede vehicles powered by the internal combustion engine. Consequently, the need for electric vehicle charging at parking stations is expected to increase.
- Autonomous vehicles may significantly impact travel patterns (either increasing or decreasing traffic volumes) and are likely to reduce the need for permanent parking spaces. This includes resident, workplace and customer/visitor parking spaces.
- The demand for car parking is generally expected to decrease over time with the rising accessibility of various ride sharing and car sharing services, possibly combined with autonomous vehicles. This is widely expected to significantly reduce demand for private car ownership and consequently the need to park cars at destinations away from home. This also has implications for on-street parking management, with the provision of drop-off/pick-up areas likely to increase in importance.

The timing and impact of these changes is uncertain, however it is now realistically expected that these changes will occur to some extent within the timeframe of the MPAC plan. These changes need to be considered when formulating future planning controls, while at the same time recognising the uncertainty around the timing and impact of these changes.
5. Review of Proposed Activity Centre Controls

The following section provides transport engineering recommendations in relation to new Activity Centre Zone controls. Our recommendations are divided into a number of areas:

- The setting of objectives to be achieved by the controls from a transport perspective.
- Precinct wide provisions, which includes recommendations for controls regarding:
  - Street network objectives
  - Vehicle access management
  - Laneways
  - Bicycle parking
- Precinct specific controls

5.1. Objectives to be achieved

Moonee Valley City Council's vision for Moonee Ponds includes the following statement in regards to transport:

*be a well-connected centre with a safe and accessible public transport interchange and an excellent network of walking and cycling connection within and to other neighbourhoods*

It is important that a future set of Activity Centre Zone controls include a reference to the intended transport objectives that the conditions aim to achieve.

A key objective of Council's MV2040 plan and reflected in the Draft MPAC Local Plan is the promotion of sustainable transport modes ahead of all other forms of transport. This should be reflected in the Activity Centre Zone controls.

It is recommended that a movement hierarchy is included in the controls. This will provide a clear decision framework when it comes to making transport-related decisions. The following hierarchy is recommended:

*To support walking and cycling as preferred modes of transport.*
*To prioritise the movement network to reflect the following hierarchy:*

1. Pedestrians
2. Cyclists
3. Public Transport Users
4. Local Freight
5. Private Motorists.

Walking is the most sustainable transport mode, requiring no resources and providing numerous direct and indirect health benefits to the community. Moonee Ponds has the potential to be highly walkable (as set out at Section 4.4.4) with the entire centre being within a 20-minute walk.
Transport Review
Moonee Ponds Activity Centre

Cycling is also recognised as a highly sustainable transport mode. Moonee Ponds is ideally placed geographically for cyclists to travel to/from MPAC to a wider variety of inner-city destinations.

Public transport is essential for the mass-transportation of people to and from the activity centre, particularly in the context of a constrained road network.

Local freight has an essential role to play in servicing the businesses within MPAC, meaning that it is more important than private vehicle travel.

Private motorists are at the bottom of the hierarchy, with private transport being the least sustainable mode in terms of resources and road-space requirements.

The following additional objectives are recommended:

- To provide legible connections for all levels of mobility to all parts of MPAC.
- To create an excellent network of walking and cycling connections within MPAC and to other neighbourhoods, supporting an active and healthy community.
- To ensure that streets are designed as safe, attractive, landscaped and pedestrian-friendly spaces.
- To significantly improve the cycling network.
- To encourage residents to cycle through improved street design and the provision of bicycle parking in developments.
- To reduce the impact of car parking on the attractiveness and usability of the centre.

5.2. Precinct Wide Provisions

5.2.1. Street Network Provisions

The ACZ controls should include a map detailing the road hierarchy and street roles for each road within MPAC. This provides a clear reference in decision-making when it comes to the intended function of each street and how new developments respond at the interface to each street.

This also leads into where vehicle access for new developments should be located and planned for (see the following section).

The recommended map provided at Figure 11 clearly defines the role of each street within MPAC:

- Arterial Roads (managed by VicRoads).
- The MPAC loop.
- Where dedicated bicycle infrastructure is proposed.
- The primary and secondary pedestrian streets.
- Pedestrian malls.
- The laneway network, including which laneways are encouraged for vehicle access and which are encouraged as pedestrian spaces.
Transport Review

Moonee Ponds Activity Centre

In preparing this plan, reference has been made specifically to Council’s proposed streetscape plans outlined in the MPAC: Streetscape and Public Spaces document. This plan is essentially a translated version of the Draft Local Plan transport map (see Figure 2), tailored for inclusion within the ACZ controls.

Each of the above street classifications are defined below:

- Arterial Roads - VicRoads’ declared Arterial Roads
- MPAC Loop - Council’s defined vehicle circulation route around MPAC
- Dedicated bicycle facility - an on-road bicycle lane will be provided (either line marked or fully separated)
- Main Pedestrian Link - a key pedestrian connection through MPAC
- Secondary Pedestrian Link - a secondary pedestrian connection through MPAC
- Local Streets - other local roads not defined as laneways or ‘pedestrian streets’
- Traffic Direction Arrows – these are provided indicate the direction of future vehicle flow
- Vehicle Laneway – A laneway focused on vehicle access to abutting properties
- Pedestrian Laneway – A laneway focused on active frontages and pedestrian use
- Pedestrian Malls – Pedestrian only spaces, usually internal to a building, but could be external areas not accessible by vehicles

Importantly, all laneways will remain shared zones and be used by vehicles, cyclists and pedestrians.
Transport Review

Moonee Ponds Activity Centre

Legend

<table>
<thead>
<tr>
<th>Type</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arterial Road</td>
<td></td>
</tr>
<tr>
<td>MPAC Loop</td>
<td></td>
</tr>
<tr>
<td>Dedicated Bicycle Facility</td>
<td></td>
</tr>
<tr>
<td>Local Street</td>
<td></td>
</tr>
<tr>
<td>Primary Pedestrian Street</td>
<td></td>
</tr>
<tr>
<td>Secondary Pedestrian Street</td>
<td></td>
</tr>
<tr>
<td>Vehicle Laneway</td>
<td></td>
</tr>
<tr>
<td>Pedestrian Laneway</td>
<td></td>
</tr>
<tr>
<td>Traffic Direction</td>
<td></td>
</tr>
<tr>
<td>Pedestrian Mall (no vehicle access)</td>
<td></td>
</tr>
</tbody>
</table>

Figure 11: Recommended Transport Map

The following provides a more detailed explanation of each classification.

**Arterial Roads**

Arterial roads are under the care and management of VicRoads. This plan does not indicate changes to these roads, which is the responsibility of VicRoads. As such, no changes are shown to these roads.
Transport Review
Moonee Ponds Activity Centre

Council's role in the management of these roads is to advocate upgrades and modifications to these roads in line with its objectives to support walking, cycling and public transport use over private vehicle travel.

The MPAC Loop
The MPAC loop is intended as a primary vehicle circulation route around MPAC. Its intended purpose is to facilitate vehicle and cyclist movements around the central part of the activity centre and provide for more direct access to large off-street car parks surrounding the centre. Consequently, drivers requiring car parking can do so by accessing the Loop, rather than driving through the middle of the Activity Centre.

In many ways, this loop already exists. As per the Moonee Valley Road Hierarchy shown at Figure 5, the loop comprises roads already designated as collector roads. +

Bicycle Infrastructure
The map details where dedicated bicycle facilities will be provided within MPAC. The bicycle infrastructure planned includes bicycle facilities around the MPAC Loop and the provision of the east-west bicycle route through Holmes Road-Puckle Street-Dean Street (see Section 4.4.3).

The provision of an east-west bicycle route is a critical missing link to the cycling network through MPAC and Moonee Valley. Through the course of preparing this report, numerous alternative options for this route were considered and weighed against Council's stated objectives. No alternative route through MPAC offers the combination of directness, connectivity, safety and level of service to cyclists.

All other local roads will be provided with Bicycle Sharrows or designated as shared zones. This is appropriate in the context of the lower vehicle speeds and volumes that these streets will carry.

This map does not specifically illustrate existing bicycle lanes along Mt Alexander Road or other potential bicycle routes along arterial roads, which is a matter for the relevant state agencies and outside the scope of these controls.

Puckle Street Changes
Puckle Street will be made one-way westbound in the future. The key reason for this change is the prioritisation of pedestrians along Puckle Street. Converting Puckle Street to one-way reclaims space for pedestrians along this street and will significantly reduce through traffic movements. These changes will improve pedestrian amenity and safety.

Puckle Street will also be upgraded to provide bi-directional access for cyclists. Puckle Street is part of a key future bicycle route through Moonee Valley (not just Moonee Ponds) as shown in Figure 9. Puckle Street is a proposed Strategic Cycling Corridor, providing a critical east-west connection. It also:

- Directly connects to Dean Street and the Moonee Ponds Creek Trail and then further east to Dawson Street and Glenlyon Road. These two roads already include on-road bicycle facilities and provide a highly direct and connective east-west cycling route.
Transport Review

Moonee Ponds Activity Centre

- Connects to Holmes Road to the west which accesses the residential areas west of MPAC, Highpoint Shopping Centre and extensive cycling trails along the Maribyrnong River.

In preparing this report, alternative routes through and around the Activity Centre for an east-west bicycle connection were investigated. None provided the same level of connectivity, directness and safety that redesigned Puckle Street could provide.

It is critically important to provide this east-west route through MPAC and Moonee Valley as a connective, direct and safety bicycle network is a key prerequisite to higher levels of cycling.

Pedestrian Streets

The plan designates Puckle Street, Hall Street and Homer Street as primarily pedestrian streets. These streets serve as the primary east-west connections through the activity centre.

Secondary pedestrian streets are the north-south streets through the centre. These are designated as secondary pedestrian streets, as they are supplemented by a number of existing and proposed north-south pedestrian laneways and malls.

Vehicular and Pedestrian Laneway Network

The map identifies all existing and future laneways within MPAC (although makes no distinction between them). The map classifies laneways into vehicle or pedestrian laneways.

All vehicle and pedestrian laneways would continue to be provided as 'shared zones' and accommodate both vehicles and pedestrians to some degree.

Vehicle focused laneways are encouraged for vehicle access and rear servicing of properties that have access to other higher order streets. In our view, it is preferential that these activities occur in laneways instead of along significant pedestrian streets due to their impact on pedestrian movement, safety and amenity. The primary (but not only) example where this is important is Hallkeeper Lane, which services rear properties front Puckle Street and Hall Street (both primary pedestrian streets).

Pedestrian focused laneways are nominated to encourage direct activation of the laneways and serve a higher number of pedestrian movements within them. In this context, the emphasis on their vehicle access function would be lower and the provision of a large number of car spaces accessed via these laneways would not be appropriate.

Pedestrian Malls are largely, but not always, internal pedestrian walkways through buildings and have no vehicle function.

Laneway connectivity

The above map includes a detailed network of laneways throughout MPAC. Many of the laneways shown are proposed or potential laneways identified in consultation with Council. The expanded laneway network is designed to achieve two key outcomes:

- Improve pedestrian permeability throughout the centre by reducing the block size and travel distances for pedestrians and eliminating dead ends.

- Improve the functionality of the laneway network for vehicle access. In particular, this network connects many existing laneways throughout the centre to each other or to the street network, eliminating dead ends wherever possible. This also allows more
Transport Review

properties to achieve a rear vehicle access outcome and increases the capacity of the laneway network to carry additional vehicles.

Increasing the connectivity of the laneway network is of critical importance to improving its functionality for all users and is an outcome that is highly desirable as part of the ACZ1 controls.

5.2.2. Vehicle Access Management

A second map should be included within the controls that defines where vehicle access is preferred for all properties within MPAC. This will assist new development proposals plan their vehicle access points and assist in promoting the role of each street within the road network.

The vehicle access hierarchy has been defined in accordance with the following hierarchy (from highest to lowest preference):

1. Vehicular Laneways
2. Pedestrian Laneways
3. Local Streets
4. MPAC Loop
5. Secondary Pedestrian Streets
6. Primary Pedestrian Streets
7. Arterial Roads

It is recommended that this hierarchy is also included in the controls. This hierarchy reinforces already established planning principles of using the lower order road for vehicle access over the higher order road. It also is specifically designed to minimise the number of vehicle access points to pedestrian priority streets within MPAC. Every vehicle access point across a footpath introduces the potential for vehicle/pedestrian conflict. This has safety implications and reduces pedestrian amenity. Carpark openings also reduce the level of active frontage of new buildings. These impacts are not desirable in highly pedestrianised areas, hence the recommendation placing primary and secondary pedestrian streets lower down the access hierarchy.

The following map applies these access principles to the road network. It is recommended that this map is included in the controls as it provides clear guidance to all stakeholders in regards to Council’s expectations for vehicle access to new developments.
Transport Review

Moonee Ponds Activity Centre

For simplicity, there are only three classification levels:

- Green – Access preferred
- Blue – Access not preferred
- Orange – No vehicle access, unless there is no other alternative

In regards to the orange ‘No access unless no alternative’ classification, this recognises the point that vehicle access cannot be denied to properties.

**Figure 12: Recommended Vehicle Access Control Map**

The guiding principles of this map are as follows:

- All laneways are suitable for and encouraged to provide vehicle access.
- No vehicle access will be provided to Arterial Roads (unless there is no alternative). This is consistent with VicRoads’ current access management policies and contemporary planning practice.
- No vehicle access applies to Primary Pedestrian Streets (unless there is no alternative).
- Access not preferred applies to selected local roads in recognition of their lower order status. It also applies to a section of Hall Street (in recognition of existing large carpark access points) and the west side of Pascoe Vale Road (which is the preferred access location for properties within the Civic Triangle in comparison to Mt Alexander Road or Kellaway Avenue, given it effectively only provides for south-bound traffic).
Transport Review
Moonee Ponds Activity Centre

- Some selected laneways are classified as 'Access not preferred' in recognition of their higher pedestrian function (such as Puckle Lane and Junction Lane).

- Vehicle access is generally preferred to the MPAC Loop, even though these roads are generally 'high order' roads. The MPAC loop has the dual function of providing a circulation route around MPAC and providing convenient access to large car parking facilities, so that vehicles do not have to circulate within the heart of the Activity Centre to find a carpark. The intention is that larger sites with potential to provide large carparks such as Moonee Ponds Central, Moonee Ponds Shopping Centre and the Woolworths site would realign their carpark entrances to be from the loop road.

5.2.3. Laneway Provisions

Physical Laneway Controls
As part of the goal of improving the connectivity and permeability of the MPAC street network for pedestrians, Council has undertaken studies of the streetscapes and laneway network within MPAC.

As set out in the preceding sections, the use of laneways for vehicle access will increase in the future. However, there are a number of existing laneways that have significant bends and require splay to be either maintained or introduced to improve vehicle access around corners. This should be addressed in the controls.

It is recommended an area-wide control is introduced that mandates the provision of a vehicle splay for any site on the inside corner of any bend in the laneways. These vehicle splays will generally not be required for vehicle access where laneways intersect streets, however future development applications should prove to the Responsible Authority that this is the case.

Any property on the inside corner of a bend in a standard 3m wide laneway (Right-of-Way) would be required to provide a minimum 3m x 3m splay, which varies in accordance with the following diagrams (see Figure 13 to Figure 15). This splay ensures adequate access by the B99 design car from AS2890.1-2004 around bends on the laneways.

This splay may not be required for wider laneways or laneways with existing splays. The controls should include some flexibility to recognise alternative solutions to the satisfaction of Council.

This splay does not allow for access by trucks, including the Small Rigid Vehicle (SRV) from AS2890.2-2018 and the 6.4m long mini waste truck. For a 3m wide laneway, the splay required is substantially larger. Accordingly, we recommend that a splay facilitating access by trucks is only required for three specific laneways that are likely to require truck access – Hallkeeper Lane, Puckle Lane and the unnamed laneway extending south of Shuter Lane (running parallel between Shuter Street and Pratt Street).

Any splay could be built over at the upper levels, provided a 3.5m headroom clearance is provided to accommodate the SRV. This should be readily achievable in most cases, as a retail/commercial ground floor use would require a similar headroom clearance in any event).

It is also recommended that pedestrian sight triangles are provided where laneways intersect public footpaths on other streets (as per Design Standard 1 of Clause 52.06-5). However, it is
Transport Review
Moonee Ponds Activity Centre

also recognised that these splayes may not always able to be achieved (particularly for heritage facades).

Accordingly, requirements for the provision of these pedestrian visibility splayes should include flexibility for them not to be provided or alternative solutions included instead. It is recommended that this requirement include the clause ‘or otherwise provided to the satisfaction of the Responsible Authority’.

Figure 13: Standard 3m-wide Laneway 90-degree Splay

Figure 14: Non-Standard Varied-Width Laneway Splay

Figure 15: Standard 3m-wide Laneway Non-Right-Angle Splay
Transport Review

Moonee Ponds Activity Centre

The following laneway controls are recommended to improve the geometry of existing laneways:

• Vehicle access splays are required in the following instances:
  – Properties on corners of Puckle Lane, Hallkeeper Lane and the unnamed laneway south of Shuter Lane (between Shuter Street and Pratt Street) are to provide adequate splays for the 6.4m Small Rigid Vehicle from AS2890.2-2018, or otherwise to the satisfaction of the Responsible Authority.
  – Properties at bends or intersections with other laneways or streets are to provide a minimum 3m x 3m vehicle access splay, or alternative solution that facilitates access by the B99 design car from AS2890.1-2004 to the satisfaction of the Responsible Authority.

• Any setbacks or splays of buildings from laneways can extend over the laneway at the upper levels (subject to other planning controls), provided a minimum 3.5m headroom clearance is maintained.

• Where laneways intersect the footpaths of public streets, pedestrian visibility splays of 2m wide x 2.5m deep should be provided on both sides of the laneway, or otherwise to the satisfaction of the Responsible Authority. Splays are not required on the driver’s side (when exiting) where the laneway is greater than 5m in width.

Pedestrian vs Vehicle Laneways

It is recommended that the controls define vehicular focused laneways vs pedestrian focused laneways. Both types of laneways would continue to be ‘shared zones’ and accessible by vehicles, cyclists and pedestrians. Both of the laneway types should be reflected in the controls.

In addition, access to on-site bicycle storage should be encouraged via laneways. This increases laneway activity. Council’s Streetscape Plan intends to upgrade all laneways to provide asphalt or cut (smooth) bluestone surfaces that would be suitable for riding.

The recommended policy controls are:

All Laneways

• Where vehicular movement in the laneway is expected to cause a material traffic or pedestrian impact, a traffic impact assessment report be provided to demonstrate that the laneway can safely accommodate the increased traffic.

• Development not obstruct existing access to other properties in the laneway.

• Laneways not be used for external refuse storage.

• Access to on-site bicycle storage is encouraged via laneways.

Vehicle focused laneways

• Where alternative street frontage is available, pedestrian access from the street be provided.

Pedestrian focused laneways

• Pedestrian entries be separate from vehicle entries and provide a safe area to enter the laneway without impacting the vehicular carriageway.
Transport Review

Moonee Ponds Activity Centre

- Pedestrian entries be well lit to foster a sense of safety and address to a development.
- Vehicle access be provided to ensure ingress and egress does not require multiple vehicular movements.
- Provide no more than one vehicle access point, per property.

It should be noted that it is outside the scope of this study to undertake a detailed traffic analysis of each laneway to assess their capacity to accommodate the additional development traffic. Our recommended controls include a requirement for new developments to assess the capacity of their impacted laneways to accommodate the additional traffic generated by new development.

We have not recommended laneway widening to accommodate additional traffic. The most logical solution if capacity issues arise is that some laneways may need to be made one-way to accommodate the additional traffic. Changing laneways to operate in a one-way manner increases the capacity of the laneway by eliminating vehicle conflicts. The proposed laneway network is highly connective, meaning that this solution is feasible to implement.

5.2.4. Bicycle Provisions

The bicycle parking requirements set out at Clause 52.34 of the Planning Scheme are out of date. Specifically, the minimum bicycle parking provisions are too low in most cases.

In the context that a key strategy of Council for the municipality and MPAC is the support and promotion of cycling as a mode of transport, it is recommended that the bicycle parking rates are increased for specific uses.

The following bicycle parking provisions are recommended for inclusion within the ACZ1 controls:

Development are to provide a high level of bicycle parking and quality end-of-trip facilities for cyclists, including the following requirements:

- Resident bicycle parking must be provided at a minimum rate of 1 space per dwelling.
- Office staff bicycle parking must be provided at a minimum rate of 1 space to each 150m² of net floor area and provide high quality end-of-trip facilities.
- Bicycle parking must be designed to meet the requirements of Clause 52.34-6 or AS2890.3-2015.
- Bicycle parking is to be conveniently accessed.
- A reduction in visitor/customer bicycle parking will be considered if suitable public bicycle parking facilities exist in close proximity to the site.
- Access to on-site bicycle storage is encouraged via laneways.

In line with the objective of the Parking Overlay, the critical land uses of dwellings and offices should be targeted for higher bicycle parking rates. It is recommended that one bicycle space per dwelling is required and the current Clause 52.34 office parking rate for staff is doubled.

It is imperative to the promotion of cycling as a mode of transport that each dwelling will have access to bicycle parking. This is also important in the context that the majority of dwellings will be provided in the form of apartments where the opportunity to own a bicycle would be
Transport Review

limited if a bicycle space was not provided. The increased bicycle parking rate also supports the lower car parking rates proposed.

We do not see a need to increase the current visitor or customer bicycle parking rates set out in Clause 52.34. However the controls should also reflect Council’s objectives to provide additional public bicycle parking. It is more appropriate in most instances that the additional bicycle parking demand of these users is accommodated on-street within public bicycle parking spaces. Public bicycle parking is just as convenient (if not more so) than on-site bicycle parking. It generally has less impact on the ground floor and active frontages of new developments compared to on-site bicycle parking for visitors (which needs to be highly convenient and easy to find). This is especially the case for smaller retail tenancies with limited frontages (such as in Puckle Street) where the impact of trying to provide customer bicycle parking on the ground floor in a location that is easy to find and use is highly problematic.

It is also recommended that the bicycle parking standards reference the latest Australian Standards (AS2890.3-2015), which includes more up to date standards for the design and layout of bicycle spaces than Clause 52.34.

5.3. Precinct Specific Controls

The following specific recommendations are made in regards to individual precincts:

- All existing and proposed laneway connections (in accordance with the transport map) need to be shown as these impact various properties.
- If street functions are included in precinct maps (MPAC loop, pedestrian priority streets, etc.), they need to be in accordance with the main transport map (see Figure 11).
- Reinforcement should be given that limited or no vehicle access to the appropriate streets, such as Puckle Street and other main pedestrian streets.
- Reinforcement should be given to encouraging vehicle access and loading via lower order streets and laneways.

5.4. Loading and Waste Collection

Loading (and by extension waste collection) is covered at Clause 65.01 of the Planning Scheme. This Clause specifies the following in respect to loading considerations:

Before deciding on an application or approval of a plan, the responsible authority must consider, as appropriate:

- The adequacy of loading and unloading facilities and any associated amenity, traffic flow and road safety impacts.

In addition, we understand the Council intends to reference Council’s own recently completed guide to waste collection Waste Management Plans – Guidelines for Planning Applicant (2018).

In an ideal world, loading and waste collection would occur on-site, with the truck gaining access via the rear of the property via a laneway or lower order road. This should be the case for large development sites. However, it needs to be recognised that this is not a practical or
Transport Review

Moonee Ponds Activity Centre

possible outcome for many properties within MPAC. The reasons are varied, however most common constraints are the layout and connectivity of the laneways not supporting truck access and smaller sites being incapable of accommodating a truck entering and exiting the site in a forwards direction. The typical characteristics of the laneways within MPAC are that they are narrow, generally around 3m wide and many of them have bends with limited splays that would allow truck access. The most obvious examples of these issues are the commercial properties along Puckle Street.

Setting aside issues around individual properties being incapable of accommodating on-site loading, improving the laneway network is a problematic and gradual process. Widening laneways to achieve truck access requires individual properties to redevelop. This is a long and uncertain process given the issues about timing of properties redeveloping.

It is recommended that in the first instance, Council encourage on-site loading and waste collection. However, it needs to be recognised that there are practical limitations to this.

Council will need to continue to provide on-street loading opportunities throughout MPAC (see Section 6.5) in recognition of these issues.

Council needs to review its waste management guidelines in two respects to provide some flexibility to site specific responses:

- Use of the smaller 6.4m long, 2.08m high waste truck should be encouraged for small-scale developments within MPAC as it is more likely to be able to be accommodated on-site and within laneways. This includes an acknowledgment of this trucks ability to use steeper grades than would normally be required by AS2890.2-2002 (including grades up to 1:4).

- The use of laneways for truck access should be encouraged, with a distinction made between using the laneway for vehicle access (which is acceptable) and using the laneway to prop and collect waste (which may not be acceptable), unless no other acceptable alternative exists for constrained sites.
6. Parking Overlay

The intent of the Parking Overlay is to ensure car parking is supplied at a rates that reflect Moonee Ponds’ status as the key Activity Centre in Moonee Valley and access to public transport. The provision of reduced car parking is designed to have a positive impact by reducing the growth of vehicular traffic within the centre and facilitating a more pedestrian and cyclist friendly environment. This is a key vision of Council’s MV2040 plan:

- be a well-connected centre with a safe and accessible public transport interchange and an excellent network of walking and cycling connection within and to other neighbourhoods.

Encouraging residents and visitors to Moonee Ponds to utilise sustainable transport modes has environmental, social and economic benefits. There are environmental effects from reduced private vehicle usage, while encouraging walking and cycling has health benefits for individuals and communities. More diverse and affordable housing options will also be available as people will be able to choose to purchase dwellings without a car parking space.

The amendment overall is designed to promote economic growth by encouraging the use of space for uses other than car parking. It will also encourage more residential and commercial development in an existing urban area that already has a high level of access to services and public transport, where high levels of car parking are undesirable.

Parking Overlay Practice Note 57 (April, 2013) sets out a number of specific matters that a new Parking Overlay can or must address. This includes:

a) Objectives of the Parking Overlay (must be addressed)

b) Car parking requirements, including the ability to specify minimum or maximum parking rates and different rates for different land uses. The overlay can cover:

- Permit requirements if the car parking requirements are not met.
- Additional decision guidelines (supplementing those already in the planning scheme) if the car parking requirements are not met.

c) Financial contribution requirements in lieu of providing the required number of car spaces.

d) Additional requirements for a car parking plan.

e) Additional design standards for car parking.

f) Additional decision guidelines for car parking plans.

The overlay recommended for MPAC does not propose financial contributions, additional requirements for car parking plans, design standards or decision guidelines for car parking plans.

In our view, there is no particular need to include additional design standards or car parking plan requirements above those currently included in Clause 52.06-9.

Requiring financial contributions for not providing the requisite number of car spaces is counter-productive to the strategic objective to reduce the level of car parking provided in new developments (and promote sustainable transport alternatives).
6.1. Definition of Objectives

The following objectives are proposed, which align with the stated objectives and Council’s vision for MPAC:

Parking Objectives to be Achieved

To identify appropriate car parking rates for various uses in the Moonee Ponds Activity Centre.

To prioritise sustainable transport modes.

To reduce the traffic impacts of new developments within the Moonee Ponds Activity Centre.

To provide simplified parking requirements that support redevelopment and changes in use.

The first three points directly relate to Council stated goals for the Activity Centre described in various planning documents. The final point relates to Council’s desire to remove barriers to the provision of lower car parking within new developments and reduce red tape associated with relatively minor changes in land use or expansions.

6.2. Parking Overlay Rates

6.2.1. Existing Situation

There is no existing Parking Overlay within MPAC and the supply of car parking is regulated under Clause 52.06 of the Moonee Valley Planning Scheme.

Amendment VC148 was introduced in August 2018, which applied the minimum car parking requirements of Column B of Clause 52.06-5 to all land within the Principal Public Transport Network area. This includes the entirety of MPAC, as shown in Figure 7.

A copy of Clause 52.06 is attached at Appendix A of this report.

Specifically, in the context of the proposed parking controls (see following section), car parking for dwellings and offices is required at the following minimum parking rates:

• Dwellings:
  – 1 space per one or two-bedroom dwelling,
  – 2 spaces per three or more bedroom dwelling, and
  – No visitor parking is required
• Offices: 3.0 car spaces per 100m² NFA.

The Column B rates were designed to reflect typical ‘Activity Centre’ parking rates. They accounted for the efficiency of sharing of car parking between multiple uses, such as (but not limited to):

• Shops being busier during the day are able to share parking with restaurants that are busier at night.
Transport Review

Moonee Ponds Activity Centre

- Residential dwellings not requiring visitor parking, which can instead rely on parking not required by commercial uses during the evening.

Tied into the sharing of car parking was a standardising of car parking rates across commercial and entertainment uses such as shops, food and drink premises, restaurants, bars and medical centres all having the same statutory requirement. This was designed to reduce the need for simple changes in use between commercial uses needing to apply for car parking reductions.

These rates however do not reflect the specific circumstances of various activity centres, including transport availability, proximity to the CBD or other Activity Centres, available car parking, etc. It also does not reflect the importance of the Activity Centre (Metropolitan Activity Centre, Major Activity Centre, Neighbourhood centre, etc.) or its potential for higher order development.

6.2.2. Proposed Parking Overlay Rates

The Parking Overlay proposed for MPAC seeks to apply the following car parking rates. The Column B parking rates to be set as maximum parking rates for all uses listed in Table 52.06-5, with the following individual exceptions:

- Car parking rates for dwellings set at a maximum parking rate of 1.0 car space per dwelling (irrespective of dwelling size) and with no visitor parking requirement.
- The Office car parking rate is set at a maximum parking rate of 2.0 car spaces per 100m² NFA.

The following reviews the rationale behind the above changes.

6.2.3. Review of Adopting Maximum Rates

The most significant change to the car parking requirements is the proposal to set the Column B car parking requirements which apply to the Activity Centre as maximum rates, instead of minimum rates. Below is a comparison of the two approaches.

<table>
<thead>
<tr>
<th>Minimum Requirements</th>
<th>Maximum Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>The 'default' Planning Scheme requirements set outs the minimum number of car spaces that should be provided for new development.</td>
<td>Developments can as of right provide any amount of car parking between the maximum limit and zero, i.e. zero car parking is acceptable by default.</td>
</tr>
<tr>
<td>A reduction (including down to zero) of the minimum requirement can be sought via a set of prescribed decision guidelines. Any reduction requires approval by Council (or VCAT).</td>
<td>Providing car parking above the maximum requirement can be sought through the use of prescribed decision guidelines. Any increase requires approval by Council (or VCAT).</td>
</tr>
<tr>
<td>In general, it is relatively rare for a development proposal to significantly exceed the current minimum parking requirements and it is very common for applications to require car parking reductions.</td>
<td>For most developments, it is expected that some car parking would continue to be provided, particularly for long-term resident or staff parking.</td>
</tr>
</tbody>
</table>
Transport Review

Moonee Ponds Activity Centre

Fundamentally, minimum parking rates adopt a ‘predict and provide’ approach to the provision of car parking. The intent is to meet the predicted demand for car parking by supplying it on each site.

This approach is inconsistent with the transport direction of Melbourne into the future. Plan Melbourne 2017-2050 is predicting that Melbourne’s population will increase from approximately 5 million to 8 million people over the next 33 years. State and local planning policies are already acknowledging the change that is required in the way in which people travel with Plan Melbourne 2017-2050. It is not possible to continue with a ‘business as usual’ approach to transport. Increased reliance on walking, cycling and public transport is imperative as Melbourne grows.

At a local level, minimum parking rates do not recognise the transport constraints of MPAC as an inner area Activity Centre, specifically that there is a finite amount of road space available for transport (see discussion at Section 4.4.1). While additional car parking can continue to be provided for new developments, the road system is not capable of providing significant additional capacity to accommodate private car travel created by the new development. Modelling undertaken by Cardno indicates that congestion will increase significantly with increased development within MPAC without significant mode shift. That is, a business as usual approach to parking provision cannot be sustained.

Indeed, road space is likely to be reallocated away from car-based transport (including traffic lanes and on-street parking) in favour of more efficient and sustainable transport modes such as public transport (trams and buses), cycling and walking.

Importantly, over-supplying car parking also undermines the sustainable transport objectives of the MPAC planning controls.

The primary benefits of applying the parking rates as maximums are as follows:

- It supports sustainable transport modes by not placing a planning-process obstacle to providing a low parking rates. Dwellings without parking or offices with low parking rates will mean greater use of sustainable transport alternatives — a highly desirable outcome strongly supported by Council policy.
- It supports lower car parking rates which will lower the impact of new development on the road network. As discussed at Section 4.4.1, traffic conditions around MPAC are expected to deteriorate considerably as the Activity Centre intensifies. Reducing the provision of car parking and consequential traffic impacts is a key measure that can be implemented by these controls.
- It provides a means to control new proposals over-supplying car parking. Applications are still able to exceed the maximum requirements though a planning permit that is subject to a detailed assessment reviewed by the Responsible Authority.
- To be flexible in the face of new transport technologies that are widely expected to reduce demand for private car ownership and car parking (both public and private parking).
- It continues to allow developments to provide car parking at the Column B rates for most uses, with the flexibility of reducing the level of car parking provided far more easily.
Transport Review

Moonee Ponds Activity Centre

- It eliminates car parking reductions as permit triggers for most all planning applications. This would reduce ‘red-tape’, cost and delay associated with car parking reductions for a significant proportion of planning applications, including:
  - Small-scale changes of use, such a changing from office to shop or from place of assembly to restaurant, which change car parking rate and therefore trigger car parking reductions.
  - Small-scale floor area changes. These are often accompanied by changes in use applications. The change in parking requirement coupled with small increases in floor areas can trigger the need for numerically large (but entirely appropriate) car parking reductions.
  - Removal of on-site parking (often in conjunction with increased floor area). A common example within Moonee Ponds would be the smaller commercial buildings along Puckle Street that are expanded to the rear by building over open areas currently used for car parking. Such small redevelopments should be actively encouraged.
  - Changes to intensity of use (e.g. patron limits).
  - Providing dwellings without car parking. This is discussed more in the following section, however the current minimum parking requirements are requiring the provision of car parking at rates higher than current ownership levels.
- It provides clarity as to expectations for car parking by new developments within MPAC to all stakeholders.
- Increases in housing affordability and choice. The cost of providing a basement car space is in the order of +$40,000, which is added onto the price of housing both in terms of rent and purchase cost. As discussed further in the review of the recommended dwelling rates, the current minimum requirements are set above the current car ownership levels, which artificially increases the cost of housing and perversely encourages higher car ownership.
- It discourages costly car parking solutions that may be redundant in future, with autonomous vehicles expected to reduce private car use in the long term (e.g. car stackers, deep basements, automatic parking systems).

The application of maximum parking rates allows the granting of a Planning Permit with no car parking automatically, even for potentially very intense land uses (for instance a large office development). We do not expect this to occur in practice due to market realities. Our experience is that the current market requires some level of car parking. This is evident through the City of Melbourne and Fishermans Bend where the market continues to provide some level of car parking in most cases.

In formulating these controls, consideration also needs to be given to how the market will react and compete with developments immediately outside of MPAC (for instance within Essendon or to the south along Mt Alexander Road, where these controls will not apply). In this case, the market is not likely to deliver very large projects with no car parking in the current climate.

A potential risk with the implementation of a maximum parking rate is that new developments seek to rely on the use of on or off-street public parking to support the car parking demand.
Transport Review

Moonee Ponds Activity Centre

they will generate. This outcome is not likely within MPAC. As detailed in Section 4.4.5, parking conditions within MPAC are highly controlled. This includes:

- Extensive short-term parking restrictions within MPAC.
- Essentially no free, unrestricted car parking within MPAC.
- Parking restrictions to protect resident parking in residential areas, including Permit Zone restrictions.

It should be noted that new developments are already ineligible for car parking permits under the Moonee Valley parking permit scheme\(^5\). Extending car parking restrictions to other areas around the periphery of MPAC (if affected by overflow parking) would be entirely consistent with the Moonee Valley Municipal Parking Strategy (dated June, 2017) and an acceptable outcome.

6.2.4. Review of the Proposed Dwelling Rate

It is recommended to apply a maximum parking rate of 1 car space per dwelling within MPAC. No visitor parking will be required, consistent with the current Column B planning controls.

The inclusion of a dwelling parking rate of 1 space per dwelling, irrespective of dwelling size is designed to:

- Reduce the road network impact of new dwellings within MPAC. In 2018, MPAC provided approximately 1,652 dwellings. This will increase to 3,800–4,200 dwellings by 2040. Accordingly, the magnitude of new dwellings within MPAC is potentially a key generator of traffic movements and the key reason why the dwelling rate is proposed to be modified. Reducing this impact on the road network is a key issue into the future.
- Ensure a lower level of resident car parking is provided within MPAC, to maximise the benefits of reduced car parking, reduced traffic impacts and the promotion of sustainable transport modes.
- Ensure dwellings are not over-supplied with car parking within MPAC.
- Encourage low car parking levels (down to zero) for dwellings by removing the barrier to new developments providing little or no car parking for dwellings by removing a planning permit trigger for a car parking reduction.

The purpose for adopting a maximum rate is to allow car parking to be automatically provided at a rate lower than existing levels. In our view, it is unlikely that all developments will adopt zero car parking provision and some level of car parking is likely to be provided on most sites.

The following sections reviews the acceptability and impacts of the proposed dwelling parking rates.

\(^5\) Resident parking permits are not able to be granted for residential use where the residential density has increased after 2006 under Council’s permit scheme. No permits are granted for employee parking.
6.2.5. Comparison to other Parking Overlays

The table below compares the proposed Parking Overlay to:

- The current ABS car ownership data for Moonee Ponds
- The Box Hill and Footscray Parking Overlays
- The Fishermans Bend Overlay
- The empirical rates approved by Council for the Moonee Valley Racecourse redevelopment.

Table 4: Review of Car Ownership Data and various Parking Overlay Rates

<table>
<thead>
<tr>
<th>Dwelling Size</th>
<th>Proposed Parking Rate (Max)</th>
<th>Moonee Ponds 2016 ABS car ownership data</th>
<th>Box Hill Parking Overlay (Min)</th>
<th>Footscray Parking Overlay (Min-Max)</th>
<th>Fishermans Bend Parking Overlay (Max)</th>
<th>Recommended Empirical Rates for MVRC (Min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-bedroom</td>
<td>1.0</td>
<td>0.8 (ABS 0.6)</td>
<td>1.0 (ABS 0.8)</td>
<td>1.0 (ABS 0.9)</td>
<td>1.0 (ABS 1.3)</td>
<td>1.0</td>
</tr>
<tr>
<td>Two-bedroom</td>
<td>1.0</td>
<td>0.5 (ABS 0.5)</td>
<td>0.5 (ABS 0.5)</td>
<td>0.5 (ABS 0.9)</td>
<td>1.0 (ABS 1.3)</td>
<td>1.0</td>
</tr>
<tr>
<td>Three-bedroom</td>
<td>1.4</td>
<td>0.4 (ABS 0.9)</td>
<td>0.5 (ABS 0.9)</td>
<td>1.5 (ABS 1.3)</td>
<td>1.5 (ABS 1.3)</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Notes:
1. Excluding social housing
2. Small sample size of only 76, 199 and 42 households. There is no social housing over 4 storeys in Moonee Ponds.

The proposed Parking Overlay would be generally consistent with the Footscray Parking Overlay with setting a maximum parking rate. The choice not to provide a minimum parking rate is one that is designed to encourage lower parking rates by eliminating the permit trigger for providing zero car parking.

The proposed Parking Overlay would be higher than what was approved within Fishermans Bend. However, the context for Fishermans Bend is that this area is planned as an extension of the Melbourne CBD. Moonee Ponds is an established Activity Centre, located at a further distance from the CBD than Fishermans Bend.

6.2.6. Review of Car Ownership Levels

The following table sets out the average car ownership rates for apartments within Moonee Ponds and 6 other inner-city suburbs that are also within approximately 6.0km of the CBD (i.e.
Transport Review

Moonee Ponds Activity Centre

the distance between MPAC and the CBD. We have reviewed apartment car ownership levels specifically as apartments are expected to make up the largest proportion of new dwellings within MPAC.

It should be noted that the ABS data for Moonee Ponds is limited by a small sample size. The data available indicates existing car ownership levels that are generally consistent with the Planning Scheme rates for two-bedroom apartments, but above the car ownership levels for one-bedroom and three-bedroom apartments.

Table 5: ABS Car Ownership Data for other Inner Suburbs (2016 Census)

<table>
<thead>
<tr>
<th>Suburb</th>
<th>Car Ownership by Apartment Household Size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>One-bedroom Average Ownership (% with no cars)</td>
</tr>
<tr>
<td>Moonee Ponds</td>
<td>0.6 (39%)</td>
</tr>
<tr>
<td>Brunswick</td>
<td>0.7 (43%)</td>
</tr>
<tr>
<td>Richmond</td>
<td>0.6 (34%)</td>
</tr>
<tr>
<td>South Yarra</td>
<td>0.6 (44%)</td>
</tr>
<tr>
<td>Footscray</td>
<td>0.6 (51%)</td>
</tr>
<tr>
<td>Hawthorn</td>
<td>0.7 (35%)</td>
</tr>
<tr>
<td>St Kilda</td>
<td>0.7 (37%)</td>
</tr>
<tr>
<td>Average</td>
<td>0.7 (40%)</td>
</tr>
</tbody>
</table>

Based on the above, it can be seen that apartment style housing in Moonee Ponds exhibits similar ownership levels to other inner suburbs of Melbourne, even though the sample size of Moonee Ponds is currently small.

From reviewing the above table, it is evident that current planning controls requiring a minimum of 1 car space per one or two-bedroom and 2 spaces per three-bedroom dwelling is effectively requiring the provision of car parking significantly above the existing ownership levels of households residing within apartments.

In particular, it is requiring:

- All one-bedroom apartments are required to provide car parking when up to 50% of households in this category do not require car parking at all. This is directly encouraging higher car ownership.
Transport Review

Moonee Ponds Activity Centre

- All two-bedroom apartments are required to provide car parking when approximately 20-25% of households in this category do not require car parking at all.
- Two spaces per three-bedroom apartment when between 56-70% of households in this category only require 0 or 1 cars.

The above car ownership data indicates that Overlay would:

- For one-bedroom apartments, the maximum rate would be above average car ownership level, however this does not mean that all developments would provide 1 car space per one-bedroom dwelling. The advantage of this control in this context is that it would provide a permit trigger free pathway to providing zero car parking for these dwellings.
- For the two-bedroom apartments, the maximum rate would be approximately consistent with the average ownership data. However, assuming that two-bedroom apartments are only provided with no more than 1 car space per apartment, it would reduce the approximately 20% of existing households in this category that own two vehicles.
- For three-bedroom apartments, it would result in a significant reduction in resident ownership levels compared to historical trends.

The Census data is a snapshot in time and does not represent how parking should be planned into the future. Irrespective of historical car ownership levels, it is important to take a forward-looking approach to the provision of car parking within MPAC. Continuing to provide car parking in accordance with the current car ownership rates will not result in a lowering of car ownership (indeed, it will have the opposite effect) and will not achieve the sustainable transport objectives of MPAC.

The adoption of a maximum starting point at Column B should, however, be monitored to ensure that change does occur in the way in which parking is provided to meet with the overarching aims of the strategy. Should parking provisions not reduce over time, it may be necessary to set maximum requirements below Column B rates to further force change in the rate of car parking being provided.

6.2.7. Are Dwellings Without Car Parking Acceptable in MPAC?

Dwellings without car parking is acceptable (and desirable) within MPAC for the following transport reasons:

- Residents have a high level of access to alternative transport modes including train, tram and bus services. These connect MPAC to the CBD, surrounding suburbs and Activity Centres. Accordingly, residents of MPAC do not require private vehicles to access many nearby key employment areas.

- There is a high level of everyday services within MPAC, including supermarkets, banks, medical centres, cafes, restaurants and other places of recreation. All of these are readily accessed by a short walk, instead of a driving (or even cycling). As such, MPAC itself is a 20-minute neighbourhood that is accessible by walking (the most sustainable transport mode) and is consistent with a key objective of Plan Melbourne and the Draft MPAC Local Plan.

- Local employment opportunities within MPAC means that some residents will be able to live and work locally and travel to work without requiring a car.
Transport Review

Moonee Ponds Activity Centre

- As an inner area Activity Centre, MPAC is a convenient cycling distance from many destinations. The redevelopment of MPAC includes a strong emphasis on new cycling infrastructure (an identified deficiency at present) that will improve its connectivity to nearby areas.

- Car parking within MPAC is highly controlled. Residents without on-site car parking will not be able to park their car in the nearby area due to existing car parking restrictions. This includes residential streets on the periphery of the Activity Centre.

- The Activity Centre provides a number of car share vehicles, and the availability of these is likely to increase over time as the Activity Centre develops.

Based on the above, residents can live within MPAC without owning a private car and that these residents would not be in a situation of ‘transport disadvantage’.

Given the richness of services and access to alternative transport opportunities, MPAC is an ideal location to provide dwellings without on-site car parking and this should be encouraged by the Planning Scheme. Implementing maximum parking rates would encourage instead of hinder (as occurs within minimum parking rates) the provision of dwellings without parking.

6.2.8. Review of the Proposed Office Rate

It is important to take a forward-looking approach to decreasing reliance on car-based travel and to encourage alternate modes for office land uses. This is particularly relevant in areas where public transport accessibility and access to other services is well provided for and will continue to improve in line with government initiatives.

By example, if a forward-looking approach was not adopted and reliance was taken solely of the historical car ownership rates and journey to work data in isolation, the car parking limitation policies which apply to many areas within the metropolitan area would not have been supportable.

A reduced rate for office uses has been applied (or is proposed) under car parking overlays which apply to activity centres across the Melbourne metropolitan area. A summary of some of these is provided in the following table, which also include the 2016 Journey to work statistics.
### Transport Review

#### Table 6: Reduced Office Car Parking Rates

<table>
<thead>
<tr>
<th>Activity Centre (Municipality)</th>
<th>Plan Melbourne Classification</th>
<th>Current Statutory Car Rate Office</th>
<th>ABS Journey to Work Data (based on Place of Employment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moonee Ponds</td>
<td>Major Activity Centre</td>
<td>Clause 52.06-5 Minimum 3 car spaces to each 100m² of net floor area</td>
<td>Moonee Ponds SA2 11.7% - Public Transport 63.8% - Car as driver</td>
</tr>
<tr>
<td>Box Hill (Whitehorse)</td>
<td>Metropolitan Activity Centre</td>
<td>Clause 45.09-1 Minimum 2 car spaces to each 100m² of net floor area</td>
<td>Box Hill SA2 12.0% - Public Transport 64.9% - Car as driver</td>
</tr>
<tr>
<td>Footscray (Maribyrnong)</td>
<td>Metropolitan Activity Centre</td>
<td>Clause 45.09-1 Minimum 1.5 car spaces to each 100m² of gross floor area Maximum 2.0 car spaces to each 100m² of gross floor area</td>
<td>Footscray SA2 13.9% - Public Transport 63.4% - Car as driver</td>
</tr>
<tr>
<td>South Melbourne (Port Phillip)</td>
<td>Fisherman’s Bend Redevelopment Area</td>
<td>Maximum 1.0 car parking space to each 100m² of gross floor area</td>
<td>South Melbourne SA2 25.8% - Public Transport 51.1% - Car as driver</td>
</tr>
<tr>
<td>Melbourne (City of Melbourne)</td>
<td>Capital City Zone - Outside The Retail Core</td>
<td>Maximum spaces = 5 x net floor area of buildings on that part of the site in sq m 1000 sq m or 12 x site area in sq m 1000 sq m</td>
<td>Melbourne SA2 (CBD Area) 61.6% - Public Transport 16.0% - Car as Driver</td>
</tr>
</tbody>
</table>

MPAC has some similar characteristics to those locations where a maximum office car parking rate has been applied through local planning policies or car parking overlays (i.e. South Melbourne and Melbourne CBD areas). Specifically, MPAC is well served by alternate transport modes and the development of MPAC over time will provide a high level of residential catchment in close proximity to the site. The recommended parking rates are not as low as either South Melbourne or the CBD (maximum 2 per 100m², instead of 1 per 100m²), reflecting the different locational characteristics of this area.

It should be noted that the Fishermans Bend Overlay applies a maximum rate of 1 space per 100m² to the entire Fishermans Bend area. Fishermans Bend includes substantial areas that have limited public transport services (bus only) and there is no certainty around when fixed rail (tram and metro services) will be provided. In contrast, Moonee Ponds has an established public transport network.

A parking rate of 2.0 car spaces per 100m² is consistent with the Parking Overlays which apply to Box Hill and Footscray (albeit as a maximum rate).
Transport Review

Moonee Ponds Activity Centre

While both of these Activity Centres are Metropolitan Activity Centres (i.e. higher order than Moonee Ponds), Footscray is a similar distance to the Melbourne CBD10. Moonee Ponds is similar to Footscray and Box Hill in that it is well serviced by public transport, being the focal point of local public transport services within the Moonee Valley LGA.

The office car parking rate is proposed to be set at a maximum parking rate of 2.0 car spaces per 100m². This rate is 33% lower than the currently applicable office parking rate of 3.0 car spaces per 100m².

The Moonee Valley Racecourse Integrated Transport Plan recommended a commercial parking rate (including office) of 2.0 car spaces per 100m² apply to land use development within the Racecourse redevelopment (albeit as a minimum, instead of maximum rate).

The use of a maximum rate will by default allow zero car parking to be provided for office developments.

The proposal to limit office car parking under the Overlay is a strategic decision designed to reduce the traffic impacts of new developments within MPAC and realise the positive benefits of sustainable transport choices.

This review finds that there is strong support a significant reduction of the office parking rate in this development in favour of alternative, sustainable transport modes for the following reasons.

6.2.9. Reduction in Traffic Impacts of New Development

Office is one land-use that is particularly conducive (and important to target) in achieving a mode shift away from private cars to public transport, cycling, walking, etc. This is particularly the case as journey to work trips for office uses are typically made during the commuter peak hours and predominantly involve single occupant vehicles.

Generally speaking, when office car parking is provided within an inner metropolitan area, it is highly used by employees. Someone within the office will drive and use the car space on a daily basis. These spaces usually then generate a car-based trip to and from work each day, and most likely during peak times for traffic congestion during commuter peak hours. An office car space is likely to generate in the order of 0.5-0.6 vehicle trips per car space during peak hours (and close to one trip over a 2 hour peak period in the morning and afternoon).

In contrast, a resident car space will not necessarily generate a trip during the commuter peak hours. For example, a resident might use alternative transport modes for trips to work (only 40% of residents use their car for journey to work purposes within the Moonee Ponds suburb currently and not all of these would be in commuter peak hours). A resident might not work that day, be a shift worker, could be retired, unemployed or not own a vehicle. As such, the traffic generation rate of residential car spaces would be in the order of 0.2-0.3 vehicle trips per peak hour during peak periods. Consequently, each office car space generates around 2 to 3 times the impact of a resident car space in terms of traffic impact.

The timing of trips for office uses typically has the greatest impact on traffic congestion on the road network and occurs when public transport services operate at higher frequencies (and offer express services in some cases). This is in contrast to an industrial use, for

10 Footscray is approximately 5km from the CBD, compared to 6km for MPAC.
Transport Review

Moonee Ponds Activity Centre

typeface nghị, where staff may work shifts, travel outside of peak periods and have more limited
access to public transport, making it more difficult to achieve a mode shift.

The MPAC Traffic Study (Cardno, 2018) concluded that the increased development scale
envisioned within Moonee Ponds could not be sustained by the existing road network. The
development potential of MPAC can only be realised by a significant mode shift for journeys
both to and from the Activity Centre and in this context, the provision of reduced office
parking as a tool to encourage this change is strongly supported.

6.2.10. The availability of convenient and efficient public transport in this area

Moonee Ponds is well serviced by public transport services, as detailed in Section 4.4.2. It
serves as a focal point within the municipality for these services. This includes train, tram and
bus services connecting MPAC both to the CBD, the remainder of the Moonee Valley LGA and
neighbouring areas of Moreland and Maribyrnong.

Public transport services also operate at their most efficient and most frequent during the
commuter peak hours.

As such, we are satisfied that office workers without car parking have alternative access to
MPAC via public transport.

6.2.11. The lack of Impact on Public Parking

Office workers require long-term car parking if they are to travel to work via private car. If this
car parking is not provided at their place of work (i.e. private parking), they need to find long-
term public on or off-street parking or use alternative transport modes.

MVCC completed detailed parking surveys of the whole Activity Centre in June, 2018 (surveys
completed by AusTraffic).

Analysis of public parking within MPAC is highly controlled. There is no unrestricted on-street
car parking within the heart of the Activity Centre, between Mt Alexander Road and the railway
line. There is limited unrestricted parking on the periphery, some of which is subject to fees.
Most residential streets around the periphery of the centre are already controlled with Permit
Zone or other short-term parking restrictions to protect residential areas from overflow
parking from the Activity Centre.

Gladstone Street off-street carpark provides all-day parking, which is subject to fees. This
carpark is in high demand during weekday business hours. The use of paid parking by office
works is an acceptable outcome as it is passing on the cost of this car parking and its impact
onto the user.

Accordingly, the existing parking controls in place within MPAC ensure the provision of
additional office space with a lower level of car parking will not result in increased demand for
on-street parking or overflow impacts into residential areas further afield. Workers can
choose to pay for off-street parking (if available and at a cost, which is acceptable) or use
alternative transport modes, achieving a key objective of MPAC.
Transport Review

Moonee Ponds Activity Centre

6.2.12. The site’s proximity to a variety of services within MPAC

Office works can combine their trip to work with access to local services. Examples of this activity includes:

- Shopping after work for essential items, such as food shopping.
- Accessing medical services immediately before, at lunchtime or after work.
- Accessing local restaurants or entertainment venues.
- Visiting a post office or bank.

Office workers have access to these facilities while they are within the Activity Centre via a short walk. They can do so during lunchtimes or immediately before or after work. Accordingly, these workers are not generating additional vehicle trips to access these services either from their home directly or while travelling to-and-from work.

6.2.13. Encouragement of "local living" in this centre

MPAC will provide a mixture of higher density residential living and employment opportunities. As such, a greater proportion of future workers within MPAC will be drawn locally from within the Activity Centre. These workers will be able to walk to work, rather than drive a private vehicle.

This is a key component of the 20-minute neighbourhood from Plan Melbourne, which includes access to local employment opportunities as a key component (see Section 3.1).

6.3. Parking Overlay Car Parking Rates Summary

The Parking Overlay proposes that the Column B parking rates to be set as maximum parking rates for all uses listed in Table 52.06-6, with the following individual exceptions:

- Car parking rates for dwellings set at a maximum parking rate of 1.0 car space per dwelling (irrespective of dwelling size) and with no visitor parking requirement.
- The Office car parking rate is set at a maximum parking rate of 2.0 car spaces per 100m² NFA.

The choice to apply maximum, instead of minimum rates is intended to reduce the level of car parking required for new developments and changes in use by removing the barrier to these lower parking rates created by the planning process. It is designed to:

- Encourage sustainable transport modes and support the key transport objectives of MPAC.
- Reduce the level of car parking provided within new developments and consequently, the traffic impact of new development on the road network
- Reduce planning barriers for many common applications within Activity Centres associated with relatively minor changes in use and intensity increases.

Dwellings and offices are specifically targeted for lower parking rates.
Transport Review

Due to the number of additional dwellings expected, they form a key target land use. MPAC is an ideal location where reduced car parking rates supportable and highly desirable from a sustainable transport perspective.

Office is another key land use and important strategic target for reduced car parking rates. Office parking is a significant generator of traffic during the critical commuter peak hours and journey to work trips by office workers are a key target for mode shift to sustainable transport modes, which are well provided for within MPAC.

6.4. Parking Overlay Decision Guidelines

Decision Guidelines will be necessary to supplement the recommended car parking provision requirements within a Parking Overlay. Specifically, Decision Guidelines are needed to guide decisions on when applications seeking to provide more than the maximum parking provisions should be allowed, as the current Clause 52.06 guidelines are designed around minimum parking requirements.

The following Decision Guidelines are recommended:

The following decision guidelines apply to an application for a permit under Clause 52.06-3, in addition to those specified in Clause 52.06-7 and elsewhere in the scheme. The responsible authority must consider, as appropriate:

- Whether the objectives of this schedule have been met.
- The impacts of the proposed car parking rates on creating sustainable transport patterns that preference walking, cycling and public transport use.
- The impact on the road network of providing car parking in excess of the maximum rate.
- The number and type of dwellings proposed, including the proportion of dwellings that contain three or more bedrooms.
- The impact of the proposed car parking rates on local amenity, including pedestrian amenity and the creation of a high quality public realm.
- The provision of alternative transport modes, including but not limited to car share, motorcycle and bicycle parking.

6.5. Management of Public Parking

Together with the Parking Overlay, the management of on and off-street public parking remains a key tool to support the activity centre and maximise the efficient of the available car parking resources.

The table below sets out Moonee Valley’s kerbside road space hierarchy, extracted from the Council’s Municipal Parking Plan (2017) for Activity Centres only.17

---

17 The Parking Plan has other parking priorities for other locations.
# Transport Review

## Moonee Ponds Activity Centre

### Table 7: Moonee Valley City Council Kerbside Road Space Hierarchy

<table>
<thead>
<tr>
<th>User Category</th>
<th>Priority</th>
<th>Activity Centre Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Zone (A zone of where no parking is provided for the benefits of pedestrians and cyclists)</td>
<td>Safety is the highest priority in all situations.</td>
<td>1</td>
</tr>
<tr>
<td>Public and Active Transport Zone</td>
<td>Public transport is the second highest priority in all situations for efficiency, environmental and social equity reasons. Typically tram/bus stop. Also includes provision of cycle and bus lanes and bicycle parking on a location specific basis.</td>
<td>2</td>
</tr>
<tr>
<td>Disabled Permit Zone</td>
<td>People with disabilities are the third highest priority across all situations for social equity reasons.</td>
<td>3</td>
</tr>
<tr>
<td>Car Sharing</td>
<td>On-street parking spaces for car sharing assist in reducing overall parking demand and therefore are encouraged.</td>
<td>6</td>
</tr>
<tr>
<td>Residents (including visitors)</td>
<td>Residents are the next highest priority in residential areas. In Major Activity Centres residents should not expect priority access to on-street parking.</td>
<td>7</td>
</tr>
<tr>
<td>Loading Zone</td>
<td>Loading zones have a medium priority in all areas to support local economic activity. In residential areas loading operations should be conducted on-site wherever possible.</td>
<td>5</td>
</tr>
<tr>
<td>Customers</td>
<td>Customers have medium priority in Major Activity centres and residential areas</td>
<td>4</td>
</tr>
<tr>
<td>Local employees</td>
<td>Local employees are encouraged to use alternative modes or use the least convenient car parking- leaving more convenient spaces for customers</td>
<td>8</td>
</tr>
<tr>
<td>Commuters</td>
<td>Commuters have medium-low priority in all areas. They require access to specific locations such as railway stations and tram stops. This also includes park and ride spaces.</td>
<td>9</td>
</tr>
<tr>
<td>School Zone</td>
<td>School students have low priority in residential and activity centre areas as most school students are under the legal driving limit and in an attempt to encourage more sustainable transport options to commute to school.</td>
<td>10</td>
</tr>
<tr>
<td>Commercial Zone</td>
<td>Using the kerb side for commercial activity is a low priority except in specific circumstances where Council has slowed traffic speeds and is encouraging pedestrian activities.</td>
<td>11</td>
</tr>
</tbody>
</table>
Transport Review

This table is extensive and covers a wide variety of users. It is recommended that a more
condensed priority framework is applied to car parking resources within MPAC. This includes
a description of the car parking type required.

The key changes are the placement of sustainable transport at the top of the priority list (as
per Council’s stated objectives for transport within MPAC) and a specific focus on drop-off/pick-up areas for rideshare services (Uber, Taxi, etc.), which are expected to grow in
popularity in future with the rise of autonomous vehicles.

Table 8: Recommended Car Parking Hierarchy

<table>
<thead>
<tr>
<th>Priority</th>
<th>Activity/Use Type</th>
<th>Parking Type</th>
<th>Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest</td>
<td>Sustainable Transport – walking, cycling and PT</td>
<td>None</td>
<td>Where required to provide enhanced sustainable transport outcomes, on-street parking provision should not be considered essential.</td>
</tr>
<tr>
<td>High</td>
<td>Local deliveries</td>
<td>Loading Zones</td>
<td>Local deliveries to the commercial businesses in the activity centre are important. Smaller lots will be unable to provide on-site loading and accessible loading zones are important to the operation of Activity Centre.</td>
</tr>
<tr>
<td></td>
<td>Disabled access</td>
<td>Disabled parking</td>
<td>These users are a high priority for social equity reasons.</td>
</tr>
<tr>
<td></td>
<td>Rideshare, including taxis, Uber, etc.</td>
<td>Very-short term parking (P5min or less)</td>
<td>The rise of Uber and car share services should be encouraged as a means of transporting people with minimal parking impact. &quot;No Parking&quot; or &quot;P5min&quot; restrictions are recommended instead of &quot;Taxi Zones&quot; which exclude other rideshare services and discourage turnover of these spaces.</td>
</tr>
<tr>
<td></td>
<td>Car Share</td>
<td>Permanent spaces</td>
<td>Moonee Ponds currently has only a limited number of car share pods that should be actively increased by Council.</td>
</tr>
<tr>
<td>Medium</td>
<td>Customer/visitor parking</td>
<td>Short-term parking</td>
<td>Provision of short-term parking is important for customers and visitors to the centre.</td>
</tr>
<tr>
<td>Low</td>
<td>Resident parking</td>
<td>Long-term or Permit Zone parking</td>
<td>While existing resident parking areas (Permit Zone areas) should be protected, no new resident parking should be provided within MPAC as these spaces are more productively used for short-term parking.</td>
</tr>
<tr>
<td>No priority</td>
<td>Workers and/Commuters</td>
<td>Long-term parking</td>
<td>This type of parking does not accord with the sustainable transport objectives of MPAC and this space is more productively used as short-term parking.</td>
</tr>
</tbody>
</table>
7. Summary of Existing Issues and Challenges and Planning Response

The purpose of this report is to support Council's proposed Planning Scheme Amendments through the implementation of the ACZ1 controls and Parking Overlay. These controls provide planning support to implement Council’s vision for MPAC.

There are a range of issues identified in the existing conditions section of this report that are outside the scope of this study, as the solutions to them are not within Council’s direct control. This includes the need to upgrade the bus interchange on Mt Alexander Road, the potential to grade separate the railway line at Puckle Street, etc.

The following table reviews the various transport challenges within MPAC and details how the proposed controls respond to them.

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic Conditions</td>
<td>The challenges of rising transport demand also present an important opportunity to support sustainable transport outcomes. MPAC offers opportunities in the following areas:</td>
</tr>
<tr>
<td></td>
<td>• MPAC is well located with respect to the Melbourne CBD and other significant Activity Centres and employment generators, which are readily accessible via public transport and within cycling distance and these trips are better served by transport modes other than private car.</td>
</tr>
<tr>
<td></td>
<td>• It provides increased housing density in an area well serviced by public transport services and providing a high level of access to everyday services, places of employment and entertainment. As such, residents within MPAC will have less need of private car trips for essential services or for journey to work purposes. These trips can be taken up by walking or cycling.</td>
</tr>
<tr>
<td></td>
<td>• Increased employment and retail opportunities within MPAC provides location well serviced by public transport services, providing both workers and customers the ability to visit the area without using a private car.</td>
</tr>
<tr>
<td></td>
<td>• The controls support mode change, particularly the Parking Overlay controls and the support of cycling and walking through streetscape upgrades.</td>
</tr>
</tbody>
</table>

Transport Review

Moonee Ponds Activity Centre

Traffic Review
## Transport Review

**Moonee Ponds Activity Centre**

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Public Transport</strong></td>
<td></td>
</tr>
<tr>
<td>The Puckle Street/Holmes Road level crossing is a barrier to movement and</td>
<td>Whether the removal of this level crossing proceeds is a matter for the state government and there are no currently announced plans for such a project. As such, it is not part of the ACZ1 controls or the scope of this report.</td>
</tr>
<tr>
<td>congested intersection.</td>
<td>It is recommended that Council continue advocating for the removal of this level crossing.</td>
</tr>
<tr>
<td>Delays to on-road public transport. Traffic congestion and lack of</td>
<td>The allocation of road space and other road management tools to improve public transport service levels is a matter for the statement government.</td>
</tr>
<tr>
<td>dedicated right-of-way for trams and buses slows down these services.</td>
<td>This amendment seeks to promote sustainable transport modes through density of development within an area well serviced by public transport and by limiting the traffic impact of new development through appropriate controls on car parking provision.</td>
</tr>
<tr>
<td>The need to upgrade the bus interchange on Mt Alexander Road</td>
<td>This project is the primary responsibility of the Department of Transport and associated agencies. As such, this issue is outside the scope of this amendment and this report. Council should lobby for and support any proposal to upgrade this interchange.</td>
</tr>
<tr>
<td><strong>Cycling Issues</strong></td>
<td></td>
</tr>
<tr>
<td>Identified issues with local bicycle network through MPAC include:</td>
<td>Council has prepared streetscape plans that map out comprehensive cycling network to address these deficiencies. These changes are reflected in the ACZ controls via the recommended transport map. The purpose of the map is clearly define the role of each street and allow developments to respond according to Council's streetscape vision.</td>
</tr>
<tr>
<td>- A lack of dedicated bicycle infrastructure within MPAC, leading to a</td>
<td></td>
</tr>
<tr>
<td>poor cycling environment.</td>
<td></td>
</tr>
<tr>
<td>- Lack of an east-west bicycle route through or around MPAC.</td>
<td></td>
</tr>
<tr>
<td>- A fragmented network of dedicated by bicycle facilities where they are</td>
<td></td>
</tr>
<tr>
<td>provided.</td>
<td></td>
</tr>
<tr>
<td>- A relatively large number of bicycle hoops, however usage is very low</td>
<td></td>
</tr>
<tr>
<td>in many areas.</td>
<td></td>
</tr>
</tbody>
</table>
## Transport Review

Moonee Ponds Activity Centre

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pedestrian Issues</strong></td>
<td><strong>Response</strong></td>
</tr>
<tr>
<td>• Significant delays to pedestrians crossing Mt Alexander Road and through the junction.</td>
<td>The proposed ACZ1 controls aim to improve the pedestrian environment within MPAC inline with Council’s vision. In particular, the controls include designations of pedestrian priority streets, which provides clear direction as to what is expected at the interface of these streets.</td>
</tr>
<tr>
<td>• A number of missing links where pedestrian crossing points of key roads could be or provided or further improved.</td>
<td>The controls include missing links in the laneway network to improve pedestrian connectivity. The controls also identify pedestrian priority laneways. The proposed access control maps are included to provide direction to new development about appropriate vehicle access locations, the design of this map has had strong reference to the pedestrian function of the streets.</td>
</tr>
<tr>
<td>• Variable quality of footpath links. Many streets within MPAC include narrow footpaths of variable width and surface quality.</td>
<td></td>
</tr>
<tr>
<td>• A lack of pedestrian amenity in some areas including lack of street activation, lighting and attractiveness.</td>
<td></td>
</tr>
<tr>
<td><strong>Car Share Vehicles</strong></td>
<td></td>
</tr>
<tr>
<td>There are only 4 car share vehicles within MPAC. This is a low number for a major inner-area activity centre.</td>
<td>Providing additional on-street or public car share spaces is not contemplated under Planning Scheme controls and it is not the appropriate mechanism to provide more of these spaces. It is recommended that Council continue to support and expand the number of on-street car share vehicles available within MPAC, a mechanism outside the scope of these controls. In particular, the importance of easily accessible, public car share vehicles should be recognised and promoted.</td>
</tr>
<tr>
<td><strong>Existing Travel Patterns</strong></td>
<td></td>
</tr>
<tr>
<td>The journey to work data highlights the opportunities and challenges of MPAC. Specifically, that it performs poorly in terms of sustainable transport use when compared to neighbouring activity centres.</td>
<td>MVCC vision for MPAC is to encourage walking and cycling above all other modes. The controls place strong emphasis on these outcomes. That MPAC currently performs poorly against other geographically similar areas only highlights the improvement can and should be achieved.</td>
</tr>
</tbody>
</table>
8. Conclusions

Having completed a detailed review of MPAC, its transport infrastructure and supporting policies, documents and reports prepared by Council, we are of the view that:

a) The following map should be included within the ACZ1 controls to clearly illustrate the intended function of road network within MPAC. Each of the street within MPAC is defined in accordance with the following categories:
   - Arterial Roads - VicRoads' declared Arterial Roads
   - MPAC Loop - Council’s defined vehicle circulation route around MPAC
   - Dedicated bicycle facility - an on-road bicycle lane will be provided (either line marked or separated
   - Main Pedestrian Link - a key pedestrian connection through MPAC
   - Secondary Pedestrian Link - a secondary pedestrian connection through MPAC
   - Traffic Direction Arrows - these are provided indicate the direction of future vehicle flow
   - Vehicle Laneway - A laneway focused on vehicle access to abutting properties
   - Pedestrian Laneway - A laneway focused on active frontages and pedestrian use
   - Pedestrian Malls - Pedestrian only spaces, usually internal to a building

Importantly, all laneways will remain shared zones and be used by vehicles and pedestrians.
The vehicle access hierarchy has been defined in accordance with the following hierarchy (from highest to lowest preference):

1. Vehicular Laneways
2. Pedestrian Laneways
3. Local Streets
4. MPAC Loop
5. Secondary Pedestrian Streets
6. Primary Pedestrian Streets
7. Arterial Roads

b) The following map should be included within the controls, which applies the above access principles to the road network. For simplicity, there are only three classification levels:
   - Green – Access preferred
   - Blue – Access not preferred
   - Orange – No vehicle access, unless there is no other alternative

In regards to the orange ‘No access unless no alternative’ classification, this recognises the point that vehicle access cannot be denied to properties.

c) The following controls are recommended for inclusion within the ACZ1 controls to improve the operation of the laneway network:

   All Laneways
   - Vehicle access splays are required in the following instances:
     - Properties on corners of Puckle Lane, Hallkeeper Lane and the unnamed laneway south of Shuter Lane (between Shuter Street and Pratt Street) are to provide adequate splays for the 6.4m Small Rigid Vehicle from AS2890.2-2018, or otherwise to the satisfaction of the Responsible Authority.
Transport Review
Moonee Ponds Activity Centre

- Properties at bends or intersections with other laneways or streets are to provide a minimum 3m x 3m vehicle access splay, or alternative solution that facilitates access by the B99 design car from AS2890.1:2004 to the satisfaction of the Responsible Authority.

- Any setbacks or splays of buildings from laneways can extend over the laneway at the upper levels (subject to other planning controls), provided a minimum 3.5m headroom clearance is maintained.

- Where laneways intersect the footpaths of public streets, pedestrian visibility splays of 2m wide x 2.5m deep should be provided on both sides of the laneway, or otherwise to the satisfaction of the Responsible Authority. Splays are not required on the driver’s side (when exiting) where the laneway is greater than 5m in width.

- Where vehicular movement in the laneway is expected to cause a material traffic or pedestrian impact, a traffic impact assessment report be provided to demonstrate that the laneway can safely accommodate the increased traffic.

- Development not obstruct existing access to other properties in the laneway.

- Laneways not be used for external refuse storage.

- Access to on-site bicycle storage is encouraged via laneways.

**Vehicle focused laneways**

- Where alternative street frontage is available, pedestrian access from the street be provided.

**Pedestrian focused laneways**

- Pedestrian entries be separate from vehicle entries and provide a safe area to enter the laneway without impacting the vehicular carriageway.

- Pedestrian entries be well lit to foster a sense of safety and address to a development.

- Vehicle access be provided to ensure ingress and egress does not require multiple vehicular movements.

- Provide no more than one vehicle access point, per property.

d) The Activity Centre Zone controls should include the following requirements in regards to bicycle parking and facilities:

- Development are to provide a high level of bicycle parking and quality end-of-trip facilities for cyclists, including the following requirements:

  - Resident bicycle parking must be provided at a minimum rate of 1 space per dwelling.

  - Office staff bicycle parking must be provided at a minimum rate of 1 space to each 150m² of net floor area and provide high quality end-of-trip facilities.

  - Bicycle parking must be designed to meet the requirements of Clause 52.34-6 or AS2890.3:2015.

  - Bicycle parking is to be conveniently accessed.
Transport Review
Moonee Ponds Activity Centre

- A reduction in visitor/customer bicycle parking will be considered if suitable public bicycle parking facilities exist in close proximity to the site.
- Access to on-site bicycle storage is encouraged via laneways.
Transport Review

Moonee Ponds Activity Centre

e) The following specific recommendations are made in regards to individual precincts:

- All existing and proposed laneway connections (in accordance with the transport map) need to be shown as these impact various properties.
- If street functions are included in precinct maps (MPAC loop, pedestrian priority streets, etc.), they need to be in accordance with the main transport map.
- Reinforcement should be given the limited or no vehicle access to the appropriate streets, such as Puckle Street and other main pedestrian streets.
- Reinforcement should be given to encouraging vehicle access and loading via lower order streets and laneways.

f) The proposed Car Parking Overlay should include the following car parking requirements:

- The Column B parking rates to be set as maximum parking rates for all uses listed in Table 52.06-5, except dwellings and offices.
- Car parking rates for dwellings set at a maximum parking rate of 1.0 car space per dwelling (irrespective of dwelling size) and with no visitor parking requirement.
- The Office car parking rate is set at a maximum parking rate of 2.0 car spaces per 100m² NFA.

g) The following decision guidelines should be included within the Parking Overlay in order to assess applications that seek to exceed the maximum parking rates:

The following decision guidelines apply to an application for a permit under Clause 52.06-3, in addition to those specified in Clause 52.06-7 and elsewhere in the scheme. The responsible authority must consider, as appropriate:

- Whether the objectives of this schedule have been met.
- The impacts of the proposed car parking rates on creating sustainable transport patterns that preference walking, cycling and public transport use.
- The impact on the road network of providing car parking in excess of the maximum rate.
- The number and type of dwellings proposed, including the proportion of dwellings that contain three or more bedrooms.
- The impact of the proposed car parking rates on local amenity, including pedestrian amenity and the creation of a high quality public realm.
- The provision of alternative transport modes, including but not limited to car share, motorcycle and bicycle parking.
Transport Review

Moonee Ponds Activity Centre

h) Council managed parking resources within MPAC should be managed in accordance with the following hierarchy of users:
1. Very High – Public Transport, Walking and Cycling Infrastructure needs
2. High – Loading Zones, Ride share/Taxi, disabled parking and Car Share vehicles
3. Medium – Customer/Visitor parking
4. Low – Resident parking (no new resident parking areas)
5. No priority – Worker/Commuter parking
Appendix A

Clause 52.06
VICTORIA PLANNING PROVISIONS

52.06

CAR PARKING

Purpose
To ensure that car parking is provided in accordance with the Municipal Planning Strategy and the Planning Policy Framework.
To ensure the provision of an appropriate number of car parking spaces having regard to the demand likely to be generated, the activities on the land and the nature of the locality.
To support sustainable transport alternatives to the motor car.
To promote the efficient use of car parking spaces through the consolidation of car parking facilities.
To ensure that car parking does not adversely affect the amenity of the locality.
To ensure that the design and location of car parking is of a high standard, creates a safe environment for users and enables easy and efficient use.

Scope
Clause 52.06 applies to:
- a new use; or
- an increase in the floor area or site area of an existing use; or
- an increase to an existing use by the measure specified in Column C of Table 1 in Clause 52.06-5 for that use.
Clause 52.06 does not apply to:
- the extension of one dwelling on a lot in the Neighbourhood Residential Zone, General Residential Zone, Residential Growth Zone, Mixed Use Zone or Township Zone; or
- the construction and use of one dwelling on a lot in the Neighbourhood Residential Zone, General Residential Zone, Residential Growth Zone, Mixed Use Zone or Township Zone unless the zone or a schedule to the zone specifies that a permit is required to construct or extend one dwelling on a lot.

Provision of car parking spaces
Before:
- a new use commences; or
- the floor area or site area of an existing use is increased; or
- an existing use is increased by the measure specified in Column C of Table 1 in Clause 52.06-5 for that use,
the number of car parking spaces required under Clause 52.06-5 or in a schedule to the Parking Overlay must be provided to the satisfaction of the responsible authority in one or more of the following ways:
- on the land; or
- in accordance with a permit issued under Clause 52.06-3; or
- in accordance with a financial contribution requirement specified in a schedule to the Parking Overlay.
If a schedule to the Parking Overlay specifies a maximum parking provision, the maximum provision must not be exceeded except in accordance with a permit issued under Clause 52.06-3.

Permit requirement
A permit is required to:
VICTORIA PLANNING PROVISIONS

- Reduce (including reduce to zero) the number of car parking spaces required under Clause 52.06-5 or in a schedule to the Parking Overlay.
- Provide some or all of the car parking spaces required under Clause 52.06-5 or in a schedule to the Parking Overlay on another site.
- Provide more than the maximum parking provision specified in a schedule to the Parking Overlay.

A permit is not required if a schedule to the Parking Overlay specifies that a permit is not required under this clause.

A permit is not required to reduce the number of car parking spaces required for a new use of land if the following requirements are met:

- The number of car parking spaces required under Clause 52.06-5 or in a schedule to the Parking Overlay for the new use is less than or equal to the number of car parking spaces required under Clause 52.06-5 or in a schedule to the Parking Overlay for the existing use of the land.
- The number of car parking spaces currently provided in connection with the existing use is not reduced after the new use commences.

A permit is not required to reduce the required number of car parking spaces for a new use of an existing building if the following requirements are met:

- The building is in the Commercial 1 Zone, Commercial 2 Zone, Commercial 3 Zone or Activity Centre Zone.
- The gross floor area of the building is not increased.
- The reduction does not exceed 10 car parking spaces.
- The building is not in a Parking Overlay with a schedule that allows a financial contribution to be paid in lieu of the provision of the required car parking spaces for the use.

VicSmart applications

Subject to Clause 71.06, an application under this clause to reduce the required number of car parking spaces by no more than 10 car parking spaces is a class of VicSmart application and must be assessed against Clause 59.10.

52.06-4

Exemption from notice and review

An application under Clause 52.06-3 is exempt from the notice requirements of section 52(1)(a), (b) and (d), the decision requirements of section 64(1), (2) and (3) and the review rights of section 82(1) of the Act if:

- the application is only for a permit under Clause 52.06-3; or
- the application is also for a permit under another provision of the planning scheme and in respect of all other permissions sought, the application is exempt from the notice requirements of Section 52(1)(e), (b) and (d), the decision requirements of Section 64(1), (2) and (3) and the review rights of Section 82(1) of the Act.

52.06-5

Number of car parking spaces required under Table 1

Table 1 of this clause sets out the car parking requirement that applies to a use listed in the Table. A car parking requirement in Table 1 may be calculated as either:

- a number of car parking spaces; or
- a percentage of the total site area that must be set aside for car parking.

Page 2 of 13
VICTORIA PLANNING PROVISIONS

A car parking requirement in Table 1 is calculated by multiplying the figure in Column A or Column B (whichever applies) by the measure (for example square metres, number of patrons or number of bedrooms) in Column C.

Column A applies unless Column B applies.

Column B applies if:

- any part of the land is identified as being within the Principal Public Transport Network Area as shown on the Principal Public Transport Network Area Maps (State Government of Victoria, August 2018); or

- a schedule to the Parking Overlay or another provision of the planning scheme specifies that Column B applies.

Where an existing use is increased by the measure specified in Column C of Table 1 for that use, the car parking requirement only applies to the increase, provided the existing number of car parking spaces currently being provided in connection with the existing use is not reduced.

If in calculating the number of car parking spaces the result is not a whole number, the required number of car parking spaces is to be rounded down to the nearest whole number.

Where the car parking requirement specified in Table 1 is calculated as a percentage of the total site area, the area to be provided for car parking includes an accessway that directly abuts any car parking spaces, but does not include any accessway or portion of an accessway that does not directly abut any car parking spaces.

The car parking requirement specified in Table 1 includes disabled car parking spaces. The proportion of spaces to be allocated as disabled spaces must be in accordance with Australian Standard AS2890.6-2009 (disabled) and the Building Code of Australia.

The car parking requirement specified for a use listed in Table 1 does not apply if:

- a car parking requirement for the use is specified under another provision of the planning scheme; or

- a schedule to the Parking Overlay specifies the number of car parking spaces required for the use.

Table 1: Car parking requirement

<table>
<thead>
<tr>
<th>Use</th>
<th>Rate Column A</th>
<th>Rate Column B</th>
<th>Car Parking Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amusement parlour</td>
<td>4</td>
<td>3.5</td>
<td>To each 100 sq m of net floor area</td>
</tr>
<tr>
<td>Art &amp; craft centre</td>
<td>4</td>
<td>3.5</td>
<td>To each 100 sq m of net floor area</td>
</tr>
<tr>
<td>Bar</td>
<td>0.4</td>
<td>3.5</td>
<td>To each patron permitted</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Space to each 100 sq m of leasable floor area</td>
</tr>
<tr>
<td>Betting agency</td>
<td>4</td>
<td>3.5</td>
<td>To each 100 sq m of leasable floor area</td>
</tr>
<tr>
<td>Bowling green</td>
<td>6</td>
<td>6</td>
<td>To each rink plus 50 per cent of the relevant requirement of any ancillary use</td>
</tr>
<tr>
<td>Child care centre</td>
<td>0.22</td>
<td>0.22</td>
<td>To each child</td>
</tr>
<tr>
<td>Cinema based entertainment facility</td>
<td>0.3</td>
<td>0.3</td>
<td>To each patron permitted</td>
</tr>
<tr>
<td>Convenience restaurant</td>
<td>0.3</td>
<td></td>
<td>To each patron permitted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.5</td>
<td>To each 100 sq m of leasable floor area</td>
</tr>
</tbody>
</table>
# VICTORIA PLANNING PROVISIONS

<table>
<thead>
<tr>
<th>Use</th>
<th>Rate Column A</th>
<th>Rate Column B</th>
<th>Car Parking Measure Column C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convenience shop if the leasable floor area exceeds 60 sq m</td>
<td>10</td>
<td>3.5</td>
<td>To each premises</td>
</tr>
<tr>
<td>Display home centre</td>
<td>5</td>
<td></td>
<td>To each dwelling for five or fewer contiguous dwellings, plus</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td>To each additional contiguous dwelling</td>
</tr>
<tr>
<td></td>
<td>3.5</td>
<td></td>
<td>To each 100 sq m of floor area</td>
</tr>
<tr>
<td>Dwelling</td>
<td>1</td>
<td>1</td>
<td>To each one or two bedroom dwelling, plus</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2</td>
<td>To each three or more bedroom dwelling (with studies or studies that are separate rooms counted as a bedroom) plus</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td>For visitors to every 5 dwellings for developments of 5 or more dwellings</td>
</tr>
<tr>
<td>Education centre other than listed in this table</td>
<td>0.4</td>
<td>0.3</td>
<td>To each student that is part of the maximum number of students on the site at any time</td>
</tr>
<tr>
<td>Food and drink premises other than listed in this table</td>
<td>4</td>
<td>3.5</td>
<td>To each 100 sq m of leasable floor area</td>
</tr>
<tr>
<td>Freezing and cool storage,</td>
<td>1.5</td>
<td></td>
<td>To each 100 sq m of net floor area</td>
</tr>
<tr>
<td>Fuel depot</td>
<td>10</td>
<td>10</td>
<td>Per cent of site area</td>
</tr>
<tr>
<td>Funeral Parlour</td>
<td>0.3</td>
<td>0.3</td>
<td>To each patron permitted</td>
</tr>
<tr>
<td>Gambling premises other than listed in this table</td>
<td>0.4</td>
<td>3.5</td>
<td>To each patron permitted</td>
</tr>
<tr>
<td>Golf course</td>
<td>4</td>
<td>4</td>
<td>To each hole plus 50 per cent of the relevant requirement of any ancillary area</td>
</tr>
<tr>
<td>Home based business</td>
<td>1</td>
<td>0</td>
<td>To each employee not a resident of the dwelling</td>
</tr>
<tr>
<td>Hotel</td>
<td>0.4</td>
<td></td>
<td>To each patron permitted</td>
</tr>
<tr>
<td>Industry other than listed in this table</td>
<td>2.9</td>
<td>1</td>
<td>To each 100 sq m of net floor area</td>
</tr>
<tr>
<td>Landscape gardening supplies</td>
<td>10</td>
<td>10</td>
<td>Per cent of site area</td>
</tr>
<tr>
<td>Mail centre</td>
<td>3.5</td>
<td>3</td>
<td>To each 100 sq m of net floor area</td>
</tr>
<tr>
<td>Manufacturing sales</td>
<td>4</td>
<td>3.5</td>
<td>To each 100 sq m of leasable floor area</td>
</tr>
<tr>
<td>Market</td>
<td>8</td>
<td>3.5</td>
<td>To each 100 sq m of site area</td>
</tr>
<tr>
<td>Materials recycling</td>
<td>10</td>
<td>10</td>
<td>Per cent of site area</td>
</tr>
<tr>
<td>Medical centre</td>
<td>5</td>
<td></td>
<td>To the first person providing health services plus</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>To every other person providing health services</td>
</tr>
<tr>
<td></td>
<td>3.5</td>
<td></td>
<td>To each 100 sq m of leasable floor area</td>
</tr>
<tr>
<td>Milk depot</td>
<td>10</td>
<td>10</td>
<td>Per cent of site area</td>
</tr>
</tbody>
</table>
### VICTORIA PLANNING PROVISIONS

<table>
<thead>
<tr>
<th>Use</th>
<th>Rate</th>
<th>Rate</th>
<th>Parking Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Use</strong></td>
<td><strong>Column</strong> A</td>
<td><strong>Column</strong> B</td>
<td><strong>Column</strong> C</td>
</tr>
<tr>
<td><strong>Motel</strong></td>
<td>1</td>
<td>1</td>
<td>To each unit, and one to each manager dwelling, plus 50 per cent of the relevant requirement of any ancillary use.</td>
</tr>
<tr>
<td><strong>Motor repairs</strong></td>
<td>3</td>
<td>3</td>
<td>To each 100 sq m of net floor area plus</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>for each vehicle being serviced, repaired or fitted with accessories, including vehicles waiting to be serviced, repaired, fitted with accessories or collected by owners.</td>
</tr>
<tr>
<td><strong>Office other than listed in this table</strong></td>
<td>0.3</td>
<td>0.3</td>
<td>To each 100 sq m of net floor area</td>
</tr>
<tr>
<td><strong>Place of assembly other than listed in this table</strong></td>
<td>0.3</td>
<td>0.3</td>
<td>To each patron permitted</td>
</tr>
<tr>
<td><strong>Postal agency</strong></td>
<td>4</td>
<td>3.5</td>
<td>To each 100 sq m of leasable floor area</td>
</tr>
<tr>
<td><strong>Primary produce sales</strong></td>
<td>4</td>
<td>3.5</td>
<td>To each 100 sq m of leasable floor area</td>
</tr>
<tr>
<td><strong>Primary school</strong></td>
<td>1</td>
<td>1</td>
<td>To each employee that is part of the maximum number of employees on the site at any time</td>
</tr>
<tr>
<td><strong>Research and development centre</strong></td>
<td>3.5</td>
<td>3</td>
<td>To each 100 sq m of net floor area</td>
</tr>
<tr>
<td><strong>Residential aged care facility</strong></td>
<td>0.3</td>
<td>0.3</td>
<td>To each lodging room</td>
</tr>
<tr>
<td><strong>Residential village</strong></td>
<td>1</td>
<td>1</td>
<td>To each one or two bedroom dwelling plus</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2</td>
<td>To each three or more bedroom dwelling (with studies or studios that are separate rooms counted as a bedrooms) plus</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>For visit to every five dwellings for developments of five or more dwellings</td>
</tr>
<tr>
<td><strong>Retirement village</strong></td>
<td>1</td>
<td>1</td>
<td>To each one or two bedroom dwelling plus</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2</td>
<td>To each three or more bedroom dwelling (with studies or studios that are separate rooms counted as a bedrooms) plus</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>For visit to every five dwellings for developments of five or more dwellings</td>
</tr>
<tr>
<td><strong>Restaurant</strong></td>
<td>0.4</td>
<td></td>
<td>To each patron permitted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.5</td>
<td>To each 100 sq m of leasable floor area</td>
</tr>
<tr>
<td><strong>Restricted retail premises</strong></td>
<td>3</td>
<td>2.5</td>
<td>To each 100 sq m of leasable floor area</td>
</tr>
<tr>
<td><strong>Rooming house</strong></td>
<td>1</td>
<td>1</td>
<td>To each four bedrooms</td>
</tr>
<tr>
<td><strong>Saleyard</strong></td>
<td>10</td>
<td>10</td>
<td>Per cent of site area</td>
</tr>
<tr>
<td><strong>Secondary school</strong></td>
<td>1.2</td>
<td>1.2</td>
<td>To each employee that is part of the maximum number of employees on the site at any time</td>
</tr>
<tr>
<td><strong>Shop other than listed in this table</strong></td>
<td>4</td>
<td>3.5</td>
<td>To each 100 sq m of leasable floor area</td>
</tr>
<tr>
<td><strong>Squash court – other than in conjunction with a dwelling</strong></td>
<td>3</td>
<td>3</td>
<td>To each court plus 50 per cent of the relevant requirement of any ancillary use</td>
</tr>
</tbody>
</table>
VICTORIA PLANNING PROVISIONS

<table>
<thead>
<tr>
<th>Use</th>
<th>Rate Column A</th>
<th>Rate Column B</th>
<th>Car Parking Column C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Store other than listed in this table</td>
<td>10</td>
<td>10</td>
<td>Per cent of site area</td>
</tr>
<tr>
<td>Supermarket</td>
<td>5</td>
<td>5</td>
<td>To each 100 sq m of leasable floor area</td>
</tr>
<tr>
<td>Swimming pool – other than in conjunction with a dwelling</td>
<td>5.6</td>
<td>5.6</td>
<td>To each 100 sq m of the site</td>
</tr>
<tr>
<td>Tennis court – other than in conjunction with a dwelling</td>
<td>4</td>
<td>4</td>
<td>To each court plus 50% of the requirement of any ancillary use</td>
</tr>
<tr>
<td>Trade supplies</td>
<td>10</td>
<td>10</td>
<td>Per cent of site area</td>
</tr>
<tr>
<td>Veterinary centre</td>
<td>5</td>
<td></td>
<td>To the first person providing animal health services plus</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>To every other person providing animal health services</td>
</tr>
<tr>
<td></td>
<td>3.5</td>
<td></td>
<td>To each 100 sq m of leasable floor area</td>
</tr>
<tr>
<td>Warehouse other than listed in this table</td>
<td>2</td>
<td>2</td>
<td>To each premises plus</td>
</tr>
<tr>
<td></td>
<td>1.5</td>
<td>1</td>
<td>To each 100 sq m of net floor area</td>
</tr>
<tr>
<td>Winery</td>
<td>0.4</td>
<td></td>
<td>To each patron permitted</td>
</tr>
<tr>
<td></td>
<td>3.5</td>
<td></td>
<td>To each 100 sq m of leasable floor area</td>
</tr>
</tbody>
</table>

52.06-6

Number of car parking spaces required for other uses

Where a use of land is not specified in Table 1 or where a car parking requirement is not specified for the use in another provision of the planning scheme or in a schedule to the Parking Overlay, before a new use commences or the floor area or site area of an existing use is increased, car parking spaces must be provided to the satisfaction of the responsible authority. This does not apply to the use of land for a temporary portable land sales office located on the land for sale.

52.06-7

Application requirements and decision guidelines for permit applications

For applications to reduce the car parking requirement

An application to reduce (including reduce to zero) the number of car parking spaces required under Clause 52.06-5 or in a schedule to the Parking Overlay must be accompanied by a Car Parking Demand Assessment.

The Car Parking Demand Assessment must assess the car parking demand likely to be generated by the proposed:

- new use; or
- increase in the floor area or site area of the existing use; or
- increase to the existing use by the measure specified in Column C of Table 1 in Clause 52.06-5 for that use.

The Car Parking Demand Assessment must address the following matters, to the satisfaction of the responsible authority:

- The likelihood of multi-purpose trips within the locality which are likely to be combined with a trip to the land in connection with the proposed use,
- The variation of car parking demand likely to be generated by the proposed use over time.
VICTORIA PLANNING PROVISIONS

- The short-stay and long-stay car parking demand likely to be generated by the proposed use.
- The availability of public transport in the locality of the land.
- The convenience of pedestrian and cyclist access to the land.
- The provision of bicycle parking and end of trip facilities for cyclists in the locality of the land.
- The anticipated car ownership rates of likely or proposed visitors to or occupants (residents or employees) of the land.
- Any empirical assessment or case study.

Before granting a permit to reduce the number of spaces, the responsible authority must consider the following, as appropriate:

- The Car Parking Demand Assessment.
- Any relevant local planning policy or incorporated plan.
- The availability of alternative car parking in the locality of the land, including:
  - Efficiencies gained from the consolidation of shared car parking spaces.
  - Public car parks intended to serve the land.
  - On street parking in non residential zones.
  - Streets in residential zones specifically managed for non-residential parking.
- On street parking in residential zones in the locality of the land that is intended to be for residential use.
- The practicality of providing car parking on the site, particularly for lots of less than 300 square metres.
- Any adverse economic impact a shortfall of parking may have on the economic viability of any nearby activity centre.
- The future growth and development of any nearby activity centre.
- Any car parking deficiency associated with the existing use of the land.
- Any credit that should be allowed for car parking spaces provided on common land or by a Special Charge Scheme or cash-in-lieu payment.
- Local traffic management in the locality of the land.
- The impact of fewer car parking spaces on local amenity, including pedestrian amenity and the amenity of nearby residential areas.
- The need to create safe, functional and attractive parking areas.
- Access to or provision of alternative transport modes to and from the land.
- The equity of reducing the car parking requirement having regard to any historic contributions by existing businesses.
- The character of the surrounding area and whether reducing the car parking provision would result in a quality/positive urban design outcome.
- Any other matter specified in a schedule to the Parking Overlay.
- Any other relevant consideration.
VICTORIA PLANNING PROVISIONS

For applications to allow some or all of the required car parking spaces to be provided on another site

Before granting a permit to allow some or all of the car parking spaces required under Clause 52.06-5 or in a schedule to the Parking Overlay to be provided on another site, the responsible authority must consider the following, as appropriate:

- The proximity of the car parking on the alternate site to the subject site.
- The likelihood of the long term provision and availability of the car parking spaces.
- Whether the location of the car parking spaces is consistent with any relevant local policy or incorporated plan.
- Any other matter specified in a schedule to the Parking Overlay.

For applications to provide more than the maximum parking provision specified in a schedule to the Parking Overlay

An application to provide more than the maximum parking provision specified in a schedule to the Parking Overlay must be accompanied by a Car Parking Demand Assessment.

The Car Parking Demand Assessment must assess the car parking demand likely to be generated by the proposed use or increase to the existing use.

The Car Parking Demand Assessment must address the following matters, to the satisfaction of the responsible authority:

- The likelihood of multi-purpose trips within the locality which are likely to be combined with a trip to the land in connection with the proposed use.
- The variation of car parking demand likely to be generated by the proposed use over time.
- The short-stay and long-stay car parking demand likely to be generated by the proposed use.
- The availability of public transport in the locality of the land.
- The convenience of pedestrian and cyclist access to the land.
- The provision of bicycle parking and end of trip facilities for cyclists in the locality of the land.
- The anticipated car ownership rates of likely or proposed visitors to or occupants (residents or employees) of the land.
- Any empirical assessment or case study.

52.06-8

Requirement for a car parking plan

Plans must be prepared to the satisfaction of the responsible authority before any of the following occurs:

- a new use commences; or
- the floor area or site area of an existing use is increased; or
- an existing use is increased by the measure specified in Column C of Table 1 in Clause 52.06-5 for that use.

The plans must show, as appropriate:

- All car parking spaces that are proposed to be provided (whether on the land or on other land).
- Access lanes, driveways and associated works.
- Allocation of car parking spaces to different uses or tenancies, if applicable.
- Any landscaping and water sensitive urban design treatments.
- Finished levels, if required by the responsible authority.
VICTORIA PLANNING PROVISIONS

- Any other matter specified in a schedule to the Parking Overlay.

Plans must be provided to the responsible authority under Clause 52.06-8 wherever Clause 52.06 applies, whether or not a permit application is being made under Clause 52.06-3 or any other provision of the planning scheme.

Where an application is being made for a permit under Clause 52.06-3 or another provision of the planning scheme, the information required under Clause 52.06-8 may be included in other plans submitted with the application.

Clause 52.06-8 does not apply where no car parking spaces are proposed to be provided.

Design standards for car parking

Plans prepared in accordance with Clause 52.06-8 must meet the design standards of Clause 52.06-9, unless the responsible authority agrees otherwise.

Design standards 1, 3, 6 and 7 do not apply to an application to construct one dwelling on a lot.

Design standard 1 – Accessways

Accessways must:

- Be at least 3 metres wide.

- Have an internal radius of at least 4 metres at changes of direction or intersection or be at least 4.2 metres wide.

- Allow vehicles parked in the last space of a dead-end accessway in public car parks to exit in a forward direction with one manoeuvre.

- Provide at least 2.1 metres headroom beneath overhead obstructions, calculated for a vehicle with a wheel base of 2.8 metres.

- If the accessway serves four or more car spaces or connects to a road in a Road Zone, the accessway must be designed so that cars can exit the site in a forward direction.

- Provide a passing area at the entrance at least 6.1 metres wide and 7 metres long if the accessway serves ten or more car parking spaces and is either more than 50 metres long or connects to a road in a Road Zone.

- Have a corner splay or area at least 50 per cent clear of visual obstructions extending at least 2 metres along the frontage road from the edge of an exit lane and 2.5 metres along the exit lane from the frontage, to provide a clear view of pedestrians on the footpath of the frontage road. The area clear of visual obstructions may include an adjacent entry or exit lane where more than one lane is provided, or adjacent landscaped areas, provided the landscaping in those areas is less than 900mm in height.

If an accessway to four or more car parking spaces is from land in a Road Zone, the access to the car spaces must be at least 6 metres from the road carriageway.

If entry to the car space is from a road, the width of the accessway may include the road.

Design standard 2 – Car parking spaces

Car parking spaces and accessways must have the minimum dimensions as outlined in Table 2.

Table 2: Minimum dimensions of car parking spaces and accessways

<table>
<thead>
<tr>
<th>Angle of car parking spaces to access way</th>
<th>Accessway width</th>
<th>Car space width</th>
<th>Car space length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parallel</td>
<td>3.6 m</td>
<td>2.3 m</td>
<td>0.7 m</td>
</tr>
<tr>
<td>45°</td>
<td>3.6 m</td>
<td>2.6 m</td>
<td>4.9 m</td>
</tr>
</tbody>
</table>
VICTORIA PLANNING PROVISIONS

<table>
<thead>
<tr>
<th>Angle of car parking spaces to access way</th>
<th>Accessway width</th>
<th>Car space width</th>
<th>Car space length</th>
</tr>
</thead>
<tbody>
<tr>
<td>60°</td>
<td>4.9 m</td>
<td>2.6 m</td>
<td>4.9 m</td>
</tr>
<tr>
<td>90°</td>
<td>6.4 m</td>
<td>2.6 m</td>
<td>4.9 m</td>
</tr>
<tr>
<td></td>
<td>5.8 m</td>
<td>2.8 m</td>
<td>4.9 m</td>
</tr>
<tr>
<td></td>
<td>5.2 m</td>
<td>3.0 m</td>
<td>4.9 m</td>
</tr>
<tr>
<td></td>
<td>4.8 m</td>
<td>3.2 m</td>
<td>4.9 m</td>
</tr>
</tbody>
</table>

Note to Table 2: Some dimensions in Table 2 vary from those shown in the Australian Standard AS2890.1-2004 (off street). The dimensions shown in Table 2 allocate more space to aisle widths and less to marked spaces to provide improved operation and access. The dimensions in Table 2 are to be used in preference to the Australian Standard AS2890.1-2004 (off street) except for disabled spaces which must achieve Australian Standard AS2890.6-2009 (disabled).

A wall, fence, column, tree, tree guard or any other structure that abuts a car space must not encroach into the area marked ‘clearance required’ on Diagram 1, other than:

- A column, tree or tree guard, which may project into a space if it is within the area marked ‘tree or column permitted’ on Diagram 1.
- A structure, which may project into the space if it is at least 2.1 metres above the space.

Diagram 1 Clearance to car parking spaces

Car spaces in garages or carparks must be at least 6 metres long and 3.5 metres wide for a single space and 5.5 metres wide for a double space measured inside the garage or carport.

Where parking spaces are provided in tandem (one space behind the other) an additional 500 mm in length must be provided between each space.

Where two or more car parking spaces are provided for a dwelling, at least one space must be under cover.

Disabled car parking spaces must be designed in accordance with Australian Standard AS2890.6-2009 (disabled) and the Building Code of Australia. Disabled car parking spaces may encroach into an accessway width specified in Table 2 by 500mm.
TUESDAY, 10 DECEMBER 2019
ATTACHMENTS – ORDINARY COUNCIL MEETING
ITEM 10.5 - ATTACHMENT E

VICTORIA PLANNING PROVISIONS

Design standard 3: Gradients
Accessway grades must not be steeper than 1:10 (10 per cent) within 5 metres of the frontage to ensure safety for pedestrians and vehicles. The design must have regard to the wheelbase of the vehicle being designed for, pedestrian and vehicular traffic volumes; the nature of the car park; and the slope and configuration of the vehicle crossover at the site frontage. This does not apply to accessways serving three dwellings or less.

Ramps (except within 5 metres of the frontage) must have the maximum grades as outlined in Table 3 and be designed for vehicles travelling in a forward direction.

Table 3: Ramp gradients

<table>
<thead>
<tr>
<th>Type of car park</th>
<th>Length of ramp</th>
<th>Maximum grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public car parks</td>
<td>20 metres or less</td>
<td>1:5 (20%)</td>
</tr>
<tr>
<td></td>
<td>longer than 20 metres</td>
<td>1:6 (16.7%)</td>
</tr>
<tr>
<td>Private or residential car parks</td>
<td>20 metres or less</td>
<td>1:4 (25%)</td>
</tr>
<tr>
<td></td>
<td>longer than 20 metres</td>
<td>1:5 (20%)</td>
</tr>
</tbody>
</table>

Where the difference in grade between two sections of ramp or floor is greater than 1:8 (12.5 per cent) for a summit grade change, or greater than 1:6.7 (15 per cent) for a sag grade change, the ramp must include a transition section of at least 2 metres to prevent vehicles screeching or bottoming.

Plans must include an assessment of grade changes of greater than 1:5.6 (18 per cent) or less than 3 metres apart for clearances, to the satisfaction of the responsible authority.

Design standard 4: Mechanical parking
Mechanical parking may be used to meet the car parking requirement provided:

- At least 25 per cent of the mechanical car parking spaces can accommodate a vehicle height of at least 1.8 metres.
- Car parking spaces that require the operation of the system are not allocated to visitors unless used in a valet parking situation.
- The design and operation is to the satisfaction of the responsible authority.

Design standard 5: Urban design
Ground level car parking, garage doors and accessways must not visually dominate public space. Car parking within buildings (including visible portions of partly submerged basements) must be screened or obscured where possible, including through the use of occupied tenancies, landscaping, architectural treatments and artworks.

Design of car parks must take into account their use as entry points to the site.

Design of new internal streets in developments must maximise on street parking opportunities.

Design standard 6: Safety
Car parking must be well lit and clearly signed.

The design of car parks must maximise natural surveillance and pedestrian visibility from adjacent buildings.

Pedestrian access to car parking areas from the street must be convenient.

Pedestrian routes through car parking areas and building entries and other destination points must be clearly marked and separated from traffic in high activity parking areas.
VICTORIA PLANNING PROVISIONS

Design standard 7: Landscaping

The layout of car parking areas must provide for water sensitive urban design treatment and landscaping.

Landscaping and trees must be planted to provide shade and shelter, soften the appearance of ground level car parking and aid in the clear identification of pedestrian paths.

Ground level car parking spaces must include trees planted with flush grilles. Spacing of trees must be determined having regard to the expected size of the selected species at maturity.

52.06-10

Decision guidelines

Before deciding that a plan prepared under Clause 52.06-8 is satisfactory the responsible authority must consider, as appropriate:

- The role and function of nearby roads and the ease and safety with which vehicles gain access to the site.
- The ease and safety with which vehicles access and circulate within the parking area.
- The provision for pedestrian movement within and around the parking area.
- The provision of parking facilities for cyclists and disabled people.
- The protection and enhancement of the streetscape.
- The provisions of landscaping for screening and shade.
- The measures proposed to enhance the security of people using the parking area particularly at night.
- The amenity of the locality and any increased noise or disturbance to dwellings and the amenity of pedestrians.
- The workability and allocation of spaces of any mechanical parking arrangement.
- The design and construction standards proposed for paving, drainage, line marking, signage, lighting and other relevant matters.
- The type and size of vehicle likely to use the parking area.
- Whether the layout of car parking spaces and access lanes is consistent with the specific standards or an appropriate variation.
- The need for the required car parking spaces to adjoin the premises used by the occupier/s, if the land is used by more than one occupier.
- Whether the layout of car spaces and accessways are consistent with Australian Standards AS2890.1-2004 (off street) and AS2890.6-2009 (disabled).
- The relevant standards of Clauses 56.06-2, 56.06-4, 56.06-5, 56.06-7 and 56.06-8 for residential developments with accessways longer than 60 metres or serving 16 or more dwellings.
- Any other matter specified in a schedule to the Parking Overlay.

52.06-11

Construction of car parking

Where a plan is required under Clause 52.06-8, the car parking spaces, access lanes, driveways and associated works and landscaping shown on the plan must be:

- constructed and available for use in accordance with the plan approved by the responsible authority; and
- formed to such levels and drained so that they can be used in accordance with the plan; and
- treated with an all-weather seal or some other durable surface; and
VICTORIA PLANNING PROVISIONS

- line-marked or provided with some other adequate means of showing the car parking spaces,
  before any of the following occurs:
  - the new use commences; or
  - the floor area or site area of the existing use is increased; or
  - the existing use is increased by the measure specified in Column C of Table 1 in Clause 52.06-5
    for that use.
ECONOMIC REPORT FOR MPAC PILOT PROJECT

FINAL REPORT
MARCH 2018

Prepared for
Moonee Valley City Council
# TABLE OF CONTENTS

**EXECUTIVE SUMMARY**

<table>
<thead>
<tr>
<th>1. INTRODUCTION</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Project scope</td>
<td>1</td>
</tr>
<tr>
<td>1.2 Report structure</td>
<td>1</td>
</tr>
</tbody>
</table>

**2. MACRO ECONOMIC CONTEXT**

| 2.1 Structural changes in Australia and Melbourne's economy | 2 |
| 2.2 Pressure on employment lands from a strong housing market | 3 |
| 2.3 Key findings | 4 |

**3. POLICY ALIGNMENT**

| 3.1 State government policy context | 5 |
| 3.2 Local government policy context | 6 |
| 3.3 Key findings | 8 |

**4. COMPARATIVE ANALYSIS**

| 4.1 Policy and strategic direction | 11 |
| 4.2 Comparison of population profiles | 14 |
| 4.3 Comparison of land use mix | 16 |
| 4.4 Employment mix | 17 |

**5. KEY SECTOR ANALYSIS**

| 5.1 The creative industries | 21 |
| 5.2 Business start ups and enterprises /microbusinesses | 22 |
| 5.3 Health sector | 23 |
| 5.4 Retail and hospitality | 24 |
| 5.5 Key findings | 25 |

**6. ECONOMIC GROWTH FORECASTS FOR MPAC**

| 6.1 Moonee Valley Economic Growth | 26 |
| 6.2 Employment forecasts | 27 |
| 6.3 Employment floerspace | 28 |
| 6.4 Scenario testing | 29 |
| 6.5 Population forecasts | 32 |
| 6.6 Key findings | 33 |

**APPENDICES**

| 34 |
EXECUTIVE SUMMARY

SGS Economics and Planning (SGS) has been commissioned by the City of Moonee Valley to complete a background economic assessment to inform and support the Moonee Ponds Activity Centre (MPAC) Pilot Project. The report is intended to provide some preliminary insights into key economic issues impacting the future of the MPAC. It should be considered alongside other research covering related issues such as development capacity, housing, design and infrastructure and used to inform further research.

The economic report includes a summary of relevant economic and policy context, employment and floorspace forecasts.

The report does not include specific planning or policy recommendations which would require consideration of a range of other factors which were outside the scope of this study.

Macro-economic context

Structural changes in the Australian economy has resulted in a decline in traditional industry sectors such as manufacturing and growth in knowledge intensive services. This includes growth in health care and related industries (due to an aging population) and sustained growth in professional services. These new services sectors are expected to locate in inner city areas and other well connected, diverse, high amenity locations.

In addition, Melbourne is in the midst of unprecedented housing development driven by strong population growth and shifting housing needs and preferences. Activity Centres are attractive locations for residential development, which routinely ‘out bid’ commercial and retail uses when sites are redeveloped.

Plan Melbourne has designated MPAC as a Major Activity Centre. In Plan Melbourne there is only limited guidance regarding how Major Activity Centres should be developed and how their development should differ from other types of Activity Centres (e.g. Metropolitan or Neighbourhood). Plan Melbourne also does not identify any specific interventions for MPAC.

MPAC could well become a more substantial employment centre, as it has some of the key drivers of employment growth, including an inner city location, good access to a labour market, mixed land use and strong transport linkages. It would be a good outcome for it to grow as an employment centre, although this is contingent upon broad government support, and specific interventions to foster employment floorspace development.

Comparative centre analysis

A review of policies and planning for comparative activity centres identified relevant planning tools and principles that could be applied to MPAC. A key theme across local government Activity Centre policies is the focus on implementing strong urban design principles and built form controls to manage growth and deliver a high quality public realm to enhance investment and economic performance and demand.

The City of Maribyrnong (Footscray), City of Boroondara (Camberwell Junction), and the City of Moreland (Coburg) are seeking to increase residential development within their activity centres. An increase in residential is positively linked to growing services, catchments for businesses and precinct activation.

While MPAC has a lower residential population than comparable Major Activity Centres, it has a greater quantum of jobs than Coburg and Glen Waverley Major Activity Centres. There are estimated to be approximately 6,800 new jobs in MPAC by 2040, which is comparable to Footscray Metropolitan Activity Centre with approximately 7,400 jobs. This indicates MPAC’s...
strength as an employment based Activity Centre. MPAC’s residential population is forecast to triple in the next 20 years, which will see it ‘catch up’ to the residential populations of comparable Major Activity Centres.

MPAC enjoys a strong foundation of commercial jobs, with over 4,000 jobs, and these are largely linked to the anchor tenant of the Australian Tax Office (ATO). By comparison, Coburg lacks a key anchor tenant, while employment in Glen Waverley is strongly reliant on retail jobs in The Glen Shopping Centre. Activity Centres with more employment are Box Hill and Camberwell. Both offer a range of retail, commercial and institutional employment. Box Hill and Footscray are both Metropolitan Activity Centres, and both have substantial institutional employment, which flows into employment in other sectors of the economy (retail and commercial in particular).

Unlike the Metropolitan Activity Centres of Footscray and Box Hill, MPAC is missing a major health and/or education institution and is less diversified in its employment offerings. However, it does still have the ATO, Foxtel and Council as major employment anchors within the centre. The dominant employment role of the ATO also presents a potential risk for MPAC if it were to relocate in the future.

### TABLE 1: COMPARATIVE POLICY AND STRATEGY ANALYSIS

<table>
<thead>
<tr>
<th>Activity Centre</th>
<th>Type as identified in Plan Melbourne</th>
<th>Key guiding strategies and policies</th>
<th>Economic drivers</th>
<th>Key directions for Activity Centre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Footscray</td>
<td>Metropolitan Activity Centre</td>
<td>Footscray Structure Plan 2014</td>
<td>Victoria University (University Town plans)</td>
<td>Revitalise retail core</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Proposed health precinct</td>
<td>Foster Creative industries</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Expand education, health and community services, increase share of professional services</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Increase supply of housing</td>
</tr>
<tr>
<td>Camberwell</td>
<td>Major Activity Centre</td>
<td>Camberwell Junction Structure Plan 2011</td>
<td>Professional services</td>
<td>Vertical mix use, with retail and commercial use at ground floor and residential above</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coburg</td>
<td>Major Activity Centre</td>
<td>Colours of Coburg; Adopted Place Framework 2012</td>
<td>Mixed land use</td>
<td>Revitalising public realm to attract commercial activity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coburg Activity Centre Place Action Plan 2017</td>
<td></td>
<td>Higher density residential development</td>
</tr>
<tr>
<td>Box Hill</td>
<td>Metropolitan Activity Centre</td>
<td>City of Whitehorse Economic Development Strategy 2014 –19</td>
<td>Box Hill Institute, Box Hill Hospital, Epworth Eastern and affiliated Health Services</td>
<td>‘CBD in the East’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Box Hill Transit City Activity Centre Structure Plan 2007</td>
<td></td>
<td>Prominent retail and hospitality destination</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Box Hill Bull Form Quiklink 2016</td>
<td></td>
<td>Neetuplying public realm to attract commercial activity</td>
</tr>
<tr>
<td>Glen Waverley</td>
<td>Major Activity Centre</td>
<td>Glen Waverley Activity Centre Masterplan 2014</td>
<td>Retail: The Glen Shopping Centre Inclusion in an Innovation corridor</td>
<td>Promotion of medical precinct</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Urban renewal for mixed use development</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Increased residential development (vertical land use mix)</td>
</tr>
</tbody>
</table>

Growth forecasts for MPAC

Significant demand for commercial employment and associated floor space is forecast for MPAC. Between 2016 and 2040, the number of jobs in MPAC is expected to double, to 14,000 jobs by 2040. 4,000 of these jobs are forecast to be in the commercial sector, and more than 1,000 are forecast in the retail sector. This translates to a need for over 160,000 square metres of additional employment floor space, including approximately 97,000 square metres of commercial floor space, 35,000 square metres of retail floor space, 21,000 square metres of institutional floor space and 7,500 square metres of industrial floor space.

There is some uncertainty as to whether this employment growth will materialise as MPAC is competing with many other inner city areas for employment growth and current zoning means employment must also compete directly with residential development. This tension between employment and residential growth can be seen in the residential forecasts: between 2018 to 2040, the residential population of MPAC is expected to more than triple, growing from 3,500 to over 11,600 people. Further, the currently poor supply of floor plates constrains employment growth to small and medium sized enterprises.

This indicates that government intervention would be invaluable in ensuring MPAC grows to become a strong employment centre and achieves it employment forecasts.

Key sector analysis

Creative industries and start ups

Given the dominance of commercial jobs in MPAC, there are opportunities to grow creative industries. This growth could include ‘embedded creatives’ working in non-creative organisations and migration of creative organisations to MPAC to service the needs of the commercial sector.

Supporting start up businesses in MPAC will foster greater diversity in the employment offering, and the MPAC is well placed to incorporate a start up cluster. This is also particularly relevant given the growth forecast for commercial jobs.

Creative sectors and start ups lend themselves to small and medium floorplates, particularly those located in adaptable buildings that allow for flexibility in leasing arrangements. The dominance of small to medium floorplates within MPAC is an opportunity to attract start ups and creative enterprises.

Health sector

There is little potential for MPAC to evolve into a major health cluster in the absence of any significant health anchor organisation, such as a hospital. MPAC could still capture significant health related employment linked to primary care services such as GPs and aged care.

Retail and hospitality

The retail and hospitality sector are expected to continue to grow in line with local population and employment growth. The sectors will have an increased focus on services and experiences consistent with the broader sector.

MPAC is not anticipated to become a major retail cluster.

Key roles for Council in supporting the development of these sectors are outlined in Chapter 5.
Key findings

MPAC has the potential to grow into a vital employment centre, however it will require some support to realise this outcome.

Despite enjoying many locational advantages, without intervention, the market is unlikely to provide the employment floorspace that is forecast as required within MPAC in the future. The fragmented land within the activity centre constrains large floor plate commercial development, and MPAC is not receiving state government support as a strategic employment centre.
1. INTRODUCTION

1.1 Project scope
SGS Economics and Planning (SGS) has been commissioned by the City of Moonee Valley to complete a background economic assessment to inform and support the Moonee Ponds Activity Centre (MPAC) Pilot Project.

The report is intended to provide some preliminary insights into key economic and development feasibility issues impacting the future of the MPAC. It should be considered alongside other research covering related issues such as development capacity, housing, design and infrastructure and used to inform further research.

The economic report includes a summary of relevant economic and policy context, employment and floorspace forecasts and a development feasibility assessment for five cases study sites located in MPAC.

The report does not include specific planning or policy recommendations which would require consideration of a range of other factors which were outside the scope of this study.

1.2 Report structure
The remainder of the report is structured as follows:

Chapter 2: Macro-economic context: provides a review of broad economic trends and how MPAC is positioned within the broader Melbourne and Victorian economy.

Chapter 3: Policy alignment: A review of relevant policy documents that summarises the MPAC role within the local and state policy context, and identification of the extent of policy alignment that exists for the objectives outlined for MPAC.

Chapter 4: Comparative analysis: A review of policies and planning for five comparative activities centres (Footscray and Box Hill Metropolitan Activity Centres, and Glen Waverley Camberwell and Coburg Major Activity Centres) and a discussion on what tools and principles are being applied to foster growth in these activity centres.

Chapter 5: Key sector analysis: An analysis of four key sectors in the metropolitan economy, their respective roles in the comparative activity centres.

Chapter 6: Employment and floorspace forecasts: Detailed job forecasts for the activity centres are included and are also converted into floor space demand. This chapter provides insight into the types of floorspace that should be fostered within MPAC.
2. MACRO ECONOMIC CONTEXT

This chapter provides a review of the broad trends and drivers in the macro economy.

2.1 Structural changes in Australia and Melbourne’s economy

During the early 1980s, the economic structure of Australia was fairly homogeneous. Manufacturing was the primary income generator across most parts of the country. Certain areas possessed specialisations in particular industries, for example, tourism, agriculture and mining in regional areas. Earlier versions of advanced business services also existed in the central core of cities since early in the 20th century.

The economic evolution of the past 30 years has resulted in a far more complex picture. The rise of knowledge intensive services, the resource boom and a high Australian dollar, has created a patchwork economy. Figure 1 below highlights the restructuring of the Australian economy for three key industries over the last two decades – with services becoming an increasingly important component of domestic product and national wealth.

![Graph showing the share of GDP for selected industries, Australia](image)

**FIGURE 1: SHARE OF GDP FOR SELECTED INDUSTRIES, AUSTRALIA**

Source: Australian Bureau of Statistics – National Accounts

This economic structural change has – and will continue to – impact on the composition of employment opportunities across Metropolitan Melbourne. Figure 2 presents historical and future employment by industry for Metropolitan Melbourne. This highlights the profound structural changes that will be occurring across the whole economy over the next two decades.
Whilst governments (local, state and federal) possess limited influence and clout over some of these economic trends, policy making still has a significant role in determining how the economy will ultimately impact on our communities. In terms of Activity Centre and Employment lands, local governments have a responsibility to ensure that local residents have access to suitable employment and services.

2.2 Pressure on employment lands from a strong housing market

Metropolitan Melbourne has also been experiencing unprecedented levels of housing development. This level of new supply has been driven by strong growth in population along with changing demographics and housing preferences.

Additional housing supply has been delivered by a wide range of parties from large private developers to private small scale (non-professional) investors. New housing supply has also been realised in a wide range of locations and development forms from high rise towers in the city, to greenfield detached housing estates on the fringe of Melbourne (see Figure 3).

In the middle ring the vast majority of new supply was delivered in more dispersed locations through small scale incremental infill. The new residential zones are more restrictive around this form of development which will likely shift this demand pressure into activity centres which typically support more intensive forms of housing development.

In the inner ring, the majority of new housing was delivered in activity centres and public transport corridors. For inner ring activity centres, most new housing was apartments. Moonee Ponds Activity Centre can be considered an inner city fringe activity centre, and development within the activity centre is assumed to follow the development patterns observed in inner area activity centres.

This significant inward pressure on housing development has increased dwelling prices in the inner and middle suburban areas; increasingly creating a divided housing market in terms of development form and opportunity.

---

1 Also referred to as ‘mum and dad’ type investors. Where existing home owners seek to capitalise on their own property. Typically doing one or two opportunistic developments rather than being heavily engaged in the sector on a full time basis.
Dwelling growth influences the relative profitability of commercial and retail developments when competing in the same market (i.e. many commercial and mixed use zoning controls allow both types of development). The significantly higher sales price per sqm of residential versus commercial and floorspace is a challenge in inner city urban renewal locations, with residential developments ‘pricing out’ employment uses.

2.3 Key findings

Manufacturing was the primary industry generating income across most parts of Australia until approximately 30 years ago. Since then, there has been considerable structural change in the Victorian economy, which has included the significant decline of manufacturing, growth in knowledge intensive jobs and the natural resource boom. In the future, there is anticipated to be major growth in health care and related industries due to an aging population and sustained growth in professional services.

Metropolitan Melbourne is in the midst of unprecedented housing development driven by strong population growth and shifting housing needs and preferences. Activity Centres such as MPAC are highly attractive locations for residential development, and can out compete commercial and retail developments due to the market experiencing higher prices per sqm for residential floorspace.

Implications for MPAC

MPAC is well placed to experience significant employment growth as the structure of the Victorian economy continues to shift. Its inner city location, the presence of mixed land uses within the centre and strong public transport linkages make it an attractive location for knowledge based job growth.

Like other urban renewal areas, MPAC is vulnerable to the impact of housing development on the profitability of commercial development. A key challenge for MPAC is that current zoning conditions mean that commercial development competes directly with residential development.
3. POLICY ALIGNMENT

This chapter includes a review of relevant policy documents to understand MPAC’s role in the within the local and state government policy context. It assesses whether the objectives outlined for MPAC are aligned with these broader local and state government policies.

3.1 State government policy context

Plan Melbourne 2017-2050

Plan Melbourne is the State Government’s strategy to guide the growth of metropolitan Melbourne over the next 35 years and is built on a vision for Melbourne to “continue to be a global city of opportunity and choice”.

Plan Melbourne commits to delivering more housing closer to jobs and public transport (Direction 2.2) and classifies three types of activity centre:

- Metropolitan Activity Centre
- Major Activity Centre
- Neighbourhood Activity Centre

Plan Melbourne sees the development of its network of activity centres across Metropolitan Melbourne as critical to Melbourne’s economic performance and seeks to reinforce the network by connecting Metropolitan and Major Activity Centres into an expanded public transport network, “encouraging more mixed-use development in appropriately located centres”.

Moonee Ponds is identified in Plan Melbourne as one of a number of Western Major Activity Centres. The plan describes Major Activity Centres as places that provide a “suburban focal point for services, employment, housing, public transport and social interaction”.

While to a lesser extent than Metropolitan Activity Centres, Major Activity Centres are expected to accommodate a degree of medium and higher density development near services, jobs and public transport. Plan Melbourne states the level of development will be dependent upon the development potential of the centre and is subject to local strategic planning. One of the difficulties in interpreting the role of different types of activity centres is a lack of clarity about the differences between each type, beyond the descriptions outlined above. Further, there is no specific interventions identified for state government to foster growth in activity centres that are not designated as National Employment clusters.

The 5 year implementation plan for Plan Melbourne 2017-2050 does not provide specific direction as to how Major Activity Centres will accommodate greater levels of employment. The lack of leadership on how Major Activity Centres should be supported to develop creates uncertainty for Moonee Valley City Council in the development of MPAC.
3.2 Local government policy context

**MV2040 Strategy**

MV2040 is a long term plan for improving the health and liveability of Moonee Valley to 2040. The paper was developed based on Council research and over 4,000 responses from the community. It was endorsed by Moonee Valley City Council on 26 June 2018.

Community feedback on the Moonee Ponds neighbourhood indicated people value amenities, open space and community. Puckle Street was identified as the current anchor of the Moonee Ponds neighbourhood.

Relevant directions from the vision for 2040 for the Moonee Ponds neighbourhood based on community feedback include:

- Be a premier business, civic, cultural, creative and entertainment destination, meeting the daily needs of residents across many neighbourhoods
- Feature high-quality architecture and design in all new high-density development
- Provide a diversity of housing options for new and existing residents
- Celebrate and protect its valued heritage.

**City of Moonee Valley ‘Business Precincts remain healthy’ Vacancy Audit**

In 2017, the City of Moonee Valley’s business precinct vacancy audit recorded vacant premises within Moonee Valley’s six largest precincts, including for Moonee Ponds. The Moonee Ponds Business Precinct had 610 business premises (based on the special rate boundary area which covers a large geographical area central to Puckle Street). Figure 4 shows the business precinct boundaries and vacant tenancies or properties.

![Figure 4: Location of vacant properties/tenancies](Source: City of Moonee Valley, 2017)
The report recorded the following insights:

- Moonee Ponds vacancy rate is 3.4 per cent, down by 2.1 per cent in the previous year indicating that demand is strong.
- 610 business premises were audited, 21 were vacant.
- Business premises grew by 4.4 per cent indicating strong business growth.
- There is a cluster of empty shops located on Puckle Street although this is less prevalent than 2016.
- Moonee Ponds Business Precinct has two dominant retail categories being, Store Based Retailing 17.5 per cent and F&B Services 20 per cent.
- Other strong categories were Personal Services 15.5 per cent e.g. beauty or massage.
- Current residential developments in Moonee Ponds will continue to drive demand.

Overall, the report indicates that the success of the Moonee Ponds Business Precinct is likely to continue, particularly considering the increase in population and significant residential developments.
3.3 Key findings

The Moonee Ponds Activity Centre: Built Form report seeks to provide certainty and improve design quality for the Moonee Ponds Activity Centre. Figure 5 illustrates the area covered by the Moonee Ponds Activity Centre.

**FIGURE 5: MOONEE PONDS ACTIVITY CENTRE STUDY AREA**

The report proposes mandatory Floor Area Ratio (FAR) controls to manage the current patterns of overdevelopment of sites, which is contributing to a range of design issues, including poor street quality and overall poor design. The proposed Floor Area Uplift (FAU) mechanism will be solely focused on delivering affordable housing.

The report supports mixed use activity and acknowledges its role in underpinning “sustainable transport patterns, providing jobs, convenience shopping, entertainment and services within a compact walking environment.”

The overarching outcomes sought by the framework include:

- High quality public realm (vibrant, safe, comfortable, sunlight and daylight access)
- High quality private amenity (sunlight, daylight, privacy, outlook)
- Development equity
- Economic prosperity (support business investment and job growth)
- Environmental sustainability (low carbon, low water use)
- Protection of existing heritage and valued character

There is close alignment between the report’s objectives and the State Government policy directions set out in Plan Melbourne for Major Activity Centres as places that provide a “suburban focal point for services, employment, housing, public transport and social interaction”. As a Major Activity Centre, it is expected that Moonee Valley will accommodate a degree of medium and higher density development near services, jobs and public transport.
The specific actions identified in *Moonee Ponds Activity Centre: Built Form* provide a strong framework for encouraging employment development within MPAC through both improving the amenity and desirability of MPAC as a place to work.
4. COMPARATIVE ANALYSIS

This chapter reviews policies and planning for comparative activity centres to identify relevant planning tools and principles that could be applied to MPAC. This chapter also compares the similarities and differences between MPAC and comparative activity centres regarding population, industry and land use.

Plan Melbourne describes how Metropolitan Activity Centres are intended to play a `major service delivery role, including government, health, justice, education services as well as retail and commercial opportunities' and as a destination for a `range of jobs, activities and housing for regional catchments that are well served by public transport'. Plan Melbourne describes Major Activity Centres as places that provide a `suburban focal point for services, employment, housing, public transport and social interaction'.

MPAC is a Major Activity Centre. In order to provide a context for understanding MPAC's role within the activity centre hierarchy, and potential for growth and expansion, 3 other Major Activity Centres were assessed (Camberwell Junction, Coburg and Glen Waverley) as well as 2 Metropolitan Activity centres (Footscray and Box Hill). These are illustrated in Figure 6.

FIGURE 6
LOCATION OF COMPARATIVE ACTIVITY CENTRES
4.1 Policy and strategic direction

Footscray Metropolitan Activity Centre

The Footscray Structure Plan 2014 recognises the rapidly changing landscape of Footscray as a ‘key destination of the inner west’ undergoing significant commercial change with the added challenge of a population which is expected to double over the next 20 years.

Footscray Station is recognised as a ‘major transit hub’ at the heart of the centre and one of the busiest stations in Melbourne. The education sector in Footscray is strong, with the presence of two Victoria University Campuses. There is momentum to increase the presence of the university within the activity centre and to develop the concept of Footscray as a University town.

The structure plan also acknowledges the west end of Paisley Street as a medical precinct with health services co-locating in proximity to local transport networks as well as a local concentration of community services.

In terms of economic development, the plan prioritises the following segments: retail; creative industries; education, health and community services; and office (see Table 2 for further details). The centre is committed to increasing the share of professional services by attracting new office and commercial development to the centre.

<table>
<thead>
<tr>
<th>Priority</th>
<th>Key directions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>Address underperforming retail sector and enhance the strong food offer (food and restaurants a key strength). Reinvestment and revitalisation of the retail core with a defined ‘niche’ required by residents, including liquor sales, food, groceries, convenience household goods and retail services.</td>
<td></td>
</tr>
<tr>
<td>Creative industries</td>
<td>Foster the growing number of creative industries.</td>
<td></td>
</tr>
<tr>
<td>Education, Health and Community Services</td>
<td>Victoria University (VU) a major educational provider with two campuses. Plans to increase presence and concept of Footscray as a 'University town' to integrate the university and student life with the centre. Presence of clusters of health and community services.</td>
<td></td>
</tr>
<tr>
<td>Office</td>
<td>Increase share of professional services. Attracting new office and commercial development to the centre. Increase local job supply.</td>
<td></td>
</tr>
</tbody>
</table>

Source: Maribyrnong City Council, 2014.

The plan has several objectives relating to housing, including:

- To facilitate a significant proportion of the new housing required to meet the projected population growth to be developed within FCAA.
- To encourage housing to locate above commercial uses to create a mix of land uses.
- To support increased residential densities in line with the precincts identified level of change.
- To provide a diversity of dwelling types, sizes and tenures across the FCAA.
- To encourage appropriate student housing in FCAA.
- To encourage affordable housing, including social housing, in the FCAA.
Box Hill Metropolitan Activity Centre

Box Hill is a large employment hub with growth in a range of sectors including government, professional services, education, health and community services. The City of Whitehorse position Box Hill as an alternative to the Melbourne CBD and a ‘Gateway to the East’ which boasts both economic prospects and lifestyle opportunities (City of Whitehorse, 2017).

Health and education have a strong presence in Box Hill, and the activity centre is home to the Box Hill Institute (services 64,770 students) as well as health care facilities Box Hill Hospital and Epworth Eastern, as well as specialised medical suites and allied health services.

The *Box Hill Structure Plan (2017)* sets out a vision for Box Hill as “the most significant urban centre in Melbourne’s Eastern Suburbs”. The Box Hill Central Activities Area is one of five strategic project areas in the *City of Whitehorse Economic Development Strategy 2014 – 2019*. The centre is considered the ‘CBD’ of the City of Whitehorse.

Improving the accessibility, use and flexibility of public open space is a priority. The following objectives for Box Hill are sought:

- Promote Box Hill as a premier destination for retail and hospitality and a model activity area in Melbourne.
- Enhance the public realm to support walkability, mixed use areas and the night-time economy.

There is a focus in the strategy on the importance of providing attractive environments within Box Hill for business and community activity, and the commitment is made to continue to support urban improvements (including the revitalisation of laneways). Guidelines have been developed to provide the street appeal and design elements required for commercial growth i.e. by encouraging outdoor trading.

Camberwell Junction Major Activity Centre

Camberwell Junction is an activity centre with a strong commercial and retail sector. The *Camberwell Junction Structure Plan (2011)* shares a vision for a contemporary and sustainable activity centre with a vision aims to achieve a dynamic mix of land uses for jobs, housing and community facilities.

Camberwell Junction has twelve precincts surrounding the core retail precinct, seven of which are mixed use precincts. In the core retail precinct, a vertical mix of uses is encouraged with retail and commercial uses at ground floor and residential above. Efforts are also made to consolidate residential development opportunities with increased ‘shop top’ housing.
Coburg Major Activity Centre

Council documents outline the following vision for Central Coburg:

“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 living. 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 in one trip.”

The Coburg Activity Centre Place Action Plan 2017 includes several actions focused on improving urban amenity, access and safety. There is a specific action to encourage residential development which is “higher density, diverse, accessible and adaptable, and includes affordable and social housing” (City of Moreland, 2017).

The Coburg Activity Centre Place Action Plan builds on the Colours of Coburg: Adopted Place Framework, developed in 2012. The place framework embraces an urban renewal agenda with a focus on becoming more productive and the ‘engine of the local economy’ by providing more jobs and building confidence for the business community. In addition, the Framework seeks to address deteriorating infrastructure as well as capitalise on strategic and highly desirable Council-owned land within the activity centre.

A range of opportunities are identified with a focus on improving the urban realm to support an increase in local residents living and working in the centre. Other directions include creating a series of walkable, interconnected and permeable streets of varying scales and character as well as a clear strategy to manage vehicular access, car parking and loading.

Glen Waverley Major Activity Centre

Plan Melbourne identifies Glen Waverley Activity Centre in the City of Monash as a Major Activity Centre.

The Glen Waverley Activity Centre Masterplan 2014 present a vision for:

“A smart, prosperous, accessible and diverse city that provides a focus for the community and the regional innovation corridor, where Council has used its land assets to develop the city’s distinct urban garden identity and increase community capacity through well-targeted services, public spaces and avenue streets”.

The City of Monash recognises that additional housing to accommodate population growth close to shops, services and public transport will have implications for the built form character of the centre. The plan aims to provide a clear framework to guide investment as well as to ensure the centre “develops in an orderly and sustainable way”.

There are nine components of the vision, which include the following:

- A convenient centre (diversity of employment, shops and transport options)
- A food and entertainment destination
- Living in the centre (diversity of housing for a diverse range of households – above shops or office or in the surrounding residential areas)
- People-focused streets (pedestrian and cycle priority/active and safe streets, laneways and shared spaces)

Key opportunities identified in the structure plan include promoting a medical precinct along Springvale Road and capitalising on urban renewal opportunities for mixed use development.
4.2 Comparison of population profiles

The residential population in 2016 for MPAC was 3,000 people\(^2\), which was significantly lower than the residential population than any of the comparison Activity Centres, particularly the Metropolitan Activity Centres of Footscray and Box Hill.

A description of the method used for developing population profiles is outlined in Appendix B.

**FIGURE 7: COMPARATIVE ANALYSIS: TOTAL POPULATION (2016)**

![Population Comparison Graph](image)

*Source: Small Area Land Use Projections, 2017/18*

---

\(^2\) It is noted that the population figures used are derived from SGS Small Area Land Use Projections for the purposes of comparison with other Activity Centres and are 2016 figures. All other references to MPAC population are the MYOY9 figure of 3,000 people in 2018.
Moonee Ponds Activity Centre’s population distribution is relatively similar to the five comparable activity centres. Box Hill Activity Centre has a higher proportion of people aged 18–25 living within the centre, corresponding to the presence of student accommodation and nearby Deakin University. Glen Waverley and Camberwell Activity Centres, both located in well-established areas, have a higher proportion of people aged 65 and over.

**FIGURE 3:** COMPARATIVE ANALYSIS: POPULATION BY AGE GROUP (%)

![Population Age Group Diagram]

Source: Small Area Land Use Project, 2017/18
4.3 Comparison of land use mix

Box Hill Activity Centre provides the greatest number of jobs of all the comparable centres, followed by Camberwell and Footscray (refer to Table 3). Employment by land use type varies greatly across the centres. A description of the method used for developing employment profiles is outlined in Appendix B.

MPAC has more commercial jobs than any other Major Activity Centre (Coburg, Glen Waverley and Camberwell), and more commercial jobs than the Footscray Metropolitan Activity Centre. It has a similar quantum of retail jobs to both Footscray and Coburg, although significantly fewer retail jobs than found in Camberwell, Box Hill or Glen Waverley. MPAC and Glen Waverley both have significantly fewer institutional jobs than any other activity centre, particularly Box Hill.

Construction land use employment is relatively small across the activity centres, reflecting the fact that they are all quite well established. Camberwell Activity centre has comparably high industrial land use employment (notably a higher proportion than Coburg and Footscray AOs), that is predominantly associated with jobs in transport, postal and warehousing.

| TABLE 3: COMPARATIVE ANALYSIS: EMPLOYMENT BY LAND USE TYPE (NUMBER OF JOBS) |
|-----------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                             | Commercial        | Retail            | Construction      | Industrial        | Institutional     | Total             |
| Moonee Ponds                | 4,551             | 1,654             | 135               | 324               | 608               | 7,037             |
| Footscray                   | 2,412             | 1,812             | 181               | 683               | 2,257             | 7,419             |
| Camberwell                  | 3,817             | 3,137             | 826               | 1,637             | 1,307             | 10,190            |
| Coburg                      | 1,798             | 1,517             | 751               | 500               | 1,525             | 5,333             |
| Box Hill                    | 7,534             | 2,780             | 830               | 675               | 7,182             | 18,502            |
| Glen Waverley               | 977               | 2,413             | 84                | 234               | 532               | 5,226             |

Source: Small Area Land Use Projections, 2017/18

When the proportion of jobs in each land use type is explored, some distinct trends can be observed. MPAC is dominated by commercial land use, while Glen Waverley has a large prevalence of Retail, associated with the Glen Shopping Centre. Box Hill has similar proportions of commercial and institutional employment, while Coburg, Footscray and Camberwell experience a more balanced mix of land uses.

| FIGURE 5: COMPARATIVE ANALYSIS: EMPLOYMENT BY LAND USE TYPE (%) |

Source: Small Area Land Use Projections, 2017/18
4.4 Employment mix

Table 4 and Figure 10 below and overleaf demonstrate that employment by ANZSIC industry is highly variable across activity centres, indicating a level of specialisation.

- MPAC has a high proportion of employment in Public Administration due to the presence of the Australian Taxation Office and Meonee Valley City Council offices.
- Box Hill Activity Centre has a strong presence of those who work in the Health Care and Social Assistance Industry due to the presence of Box Hill Institute, Box Hill Hospital, Epworth Eastern and complementary health services.
- Glen Waverley has the highest proportion of Retail trade jobs, associated with the Glen Shopping Centre.

### TABLE 4: COMPARATIVE ANALYSIS: EMPLOYMENT BY ANZSIC INDUSTRY (NUMBER OF JOBS)

<table>
<thead>
<tr>
<th>Moonee Ponds</th>
<th>Footscray</th>
<th>Camberwell</th>
<th>Coburg</th>
<th>Box Hill</th>
<th>Glen Waverley</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Forestry and Fishing</td>
<td>3</td>
<td>3</td>
<td>7</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Mining</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>97</td>
<td>295</td>
<td>367</td>
<td>335</td>
<td>235</td>
</tr>
<tr>
<td>Electricity, Gas, Water and Waste Services</td>
<td>0</td>
<td>29</td>
<td>28</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Construction</td>
<td>1,335</td>
<td>185</td>
<td>166</td>
<td>153</td>
<td>310</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>275</td>
<td>33</td>
<td>75</td>
<td>66</td>
<td>190</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>957</td>
<td>829</td>
<td>1,509</td>
<td>826</td>
<td>1,378</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>546</td>
<td>62</td>
<td>747</td>
<td>447</td>
<td>913</td>
</tr>
<tr>
<td>Transport, Postal and Warehousing</td>
<td>54</td>
<td>270</td>
<td>945</td>
<td>100</td>
<td>182</td>
</tr>
<tr>
<td>Information Media and Telecommunication</td>
<td>124</td>
<td>81</td>
<td>931</td>
<td>45</td>
<td>172</td>
</tr>
<tr>
<td>Financial and Insurance Services</td>
<td>902</td>
<td>174</td>
<td>825</td>
<td>180</td>
<td>413</td>
</tr>
<tr>
<td>Rental, Hiring and Real Estate Services</td>
<td>23</td>
<td>111</td>
<td>136</td>
<td>0</td>
<td>303</td>
</tr>
<tr>
<td>Professional, Scientific and Technical Services</td>
<td>435</td>
<td>520</td>
<td>1,349</td>
<td>334</td>
<td>1,486</td>
</tr>
<tr>
<td>Administrative and Support Services</td>
<td>1,095</td>
<td>118</td>
<td>374</td>
<td>113</td>
<td>1,840</td>
</tr>
<tr>
<td>Public Administration and Safety</td>
<td>2,225</td>
<td>1,289</td>
<td>770</td>
<td>931</td>
<td>1,210</td>
</tr>
<tr>
<td>Education and Training</td>
<td>109</td>
<td>149</td>
<td>200</td>
<td>508</td>
<td>135</td>
</tr>
<tr>
<td>Health Care and Social Assistance</td>
<td>697</td>
<td>1,462</td>
<td>949</td>
<td>1,005</td>
<td>6,146</td>
</tr>
<tr>
<td>Arts and Recreation Services</td>
<td>101</td>
<td>55</td>
<td>68</td>
<td>129</td>
<td>106</td>
</tr>
<tr>
<td>Other Services</td>
<td>157</td>
<td>519</td>
<td>427</td>
<td>254</td>
<td>480</td>
</tr>
<tr>
<td>Total</td>
<td>7,037</td>
<td>7,410</td>
<td>10,190</td>
<td>5,813</td>
<td>18,502</td>
</tr>
</tbody>
</table>

Source: Small Area Land Use Projections, 2017/18
A key theme across local government Activity Centre policies is the focus on implementing strong urban design principles and built form controls to manage growth and deliver a high quality public realm to enhance investment and economic performance.

The Metropolitan Activity Centres examined typically have a greater existing concentration of and emphasis on professional services, and health and education.

The City of Maribyrnong (Footscray) City of Boroondara (Camberwell Junction), and the City of Moreland (Coburg) are seeking to increase residential development within their activity centres. An increase in residential is positively linked to growing services, catchments for businesses and precinct activation. Table 5 below summarises the key policies, economic drivers and directions for each activity centre.
Metropolitan versus Major Activity Centres

Box Hill Activity Centre is strongly aligned with Plan Melbourne’s vision for a Metropolitan Activity Centre. It is home to several key institutions and offers a range of employment opportunities and is a key public transport hub. The substantial health and education offerings within the activity centre mean that it is performing a major service delivery role to a regional catchment.

Footscray Activity Centre is also a metropolitan level activity centre. While it is home to Victoria University, it lacks the strong institutional job offering found in Box Hill. Currently, there is a significant prospect that the Footscray Hospital will relocate to a site within the Activity Centre. This will provide a significant boost to the diversity of job offerings within Footscray Activity Centre and will generate growth in other types of complementary employment - retail and hospitality. Footscray is home to a number of justice and community service organisations. While these do not provide a large number of jobs, their presence highlights how Footscray Activity Centre plays a major service delivery role to the western regional catchment. These metropolitan activity centres can be readily distinguished from the major activity centres assessed on account of their role in service delivery at a regional level.

The major activity centres (Camberwell, Coburg, Glen Waverley and Moonee Ponds) all lack a strong presence of institutions and organisations that serve a regional catchment. This is reflected in the lower number of institutional jobs across all the major activity centres compared with the metropolitan activity centres.

<table>
<thead>
<tr>
<th>Activity Centre</th>
<th>Type as identified in Plan Melbourne</th>
<th>Key guiding strategies and policies</th>
<th>Economic drivers</th>
<th>Key directions for Activity Centre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Footscray</td>
<td>Metropolitan Activity Centre</td>
<td>Pedestrian and Cycle Network</td>
<td>Victoria University (University Town plans) Proposed health precinct</td>
<td>Revitalise retail core Foster Creative industries Expand Education, health and community services, increase share of professional services Increase supply of housing</td>
</tr>
<tr>
<td>Camberwell</td>
<td>Major Activity Centre</td>
<td>Colours of Coburg: Adopted Place Framework 2012 Coburg Activity Centre Place Action Plan 2017</td>
<td>Professional services</td>
<td>Vertical land use mix with retail and commercial use at ground floor and residential above</td>
</tr>
<tr>
<td>Coburg</td>
<td>Major Activity Centre</td>
<td>Colours of Coburg: Adopted Place Framework 2012 Coburg Activity Centre Place Action Plan 2017</td>
<td>Mixed Land Use</td>
<td>Revitalising public realm to attract commercial activity Higher density residential development</td>
</tr>
<tr>
<td>Box Hill</td>
<td>Metropolitan Activity Centre</td>
<td>City of Whitehorse Economic Development Strategy 2014 – 19 Box Hill Transit City Activity Centre Structure Plan 2007 Box Hill Built Form Guidelines 2016</td>
<td>Box Hill Institute, Box Hill Hospital, Epworth Eastern and affiliated health services</td>
<td>&quot;CBD in the East&quot; Premier retail and hospitality destination Revitalising public realm to attract commercial activity</td>
</tr>
<tr>
<td>Glen Waverley</td>
<td>Major Activity Centre</td>
<td>Glen Waverley Activity Centre Masterplan 2014</td>
<td>Retail: The Glen Shopping Centre Inclusion in an innovation corridor</td>
<td>Promotion of medical precinct Urban renewal for mixed use development Increased residential development (vertical land use mix)</td>
</tr>
</tbody>
</table>

Source: SGS Economics and Planning, 2017
Function of MPAC as a Major Activity Centre

MPAC has a lower residential population than comparable activity centres, however it has a greater quantum of jobs than several comparable activity centres (Coburg and Glen Waverley). Currently there are estimated to be approximately 6,800 jobs in MPAC, which is comparable to Footscray Metropolitan Activity Centre, where there are approximately 7,400 jobs.

MPAC enjoys a strong foundation of commercial jobs, with over 4,000 jobs, and these are linked to the anchor tenant of the ATO (Coburg lacks a key anchor tenant, while employment in Glen Waverley is strongly reliant on retail jobs in the Glen Shopping Centre). The Activity Centres with greater levels of employment are Box Hill and Camberwell, and they both have a range of retail, commercial and institutional employment offerings. The metropolitan activity centres of Box Hill and Footscray both have substantial institutional employment, which flows into employment in other sectors of the economy (retail and commercial in particular), and this is the key way they are distinguished from the major activity centres.

MPAC is missing a major health and/or education institution and is less diversified in its employment offerings than Box Hill, Footscray or Camberwell. It does have the ATO, Foxtel and Council as major employment anchors, however the ATO presents a potential risk to employment if it relocates.
5. KEY SECTOR ANALYSIS

This chapter describes the trends that are occurring in four key industrial sectors, and the extent of their alignment with MPAC.

5.1 The creative industries

Creative industries tend to be heavily reliant on a uniquely skilled labour force, with human capital and state-of-the-art technologies their vital production factors. In creative industries knowledge and skills often intersect with these technologies to produce differentiated outputs that are not easily replicated and often a source of substantial regional competitive advantage.

The creative workforce represents a combination of employment within creative industries and creative occupations. The Creative Trident is Queensland University of Technology Centre of Excellence for Creative Industries and Innovation (QUT CCI)’s methodology for expressing the different metrics of the creative occupations and creative segments and sectors (refer to Figure 11). The creative workforce includes specialist creatives, support workers and embedded creatives (the creative trident – refer to):

- Specialist creatives: those who are creatively occupied and work within the creative industries.
- Support workers: those who are not creatively occupied but do work within the creative industries.
- Embedded creatives: those who are creatively occupied but work outside the creative industries.

**Figure 11: The Creative Trident**

<table>
<thead>
<tr>
<th>Occupations</th>
<th>Employed in creative occupations</th>
<th>Employed in non-creative occupations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialist creatives</td>
<td>Embedded creatives</td>
<td>Total employment in creative occupations</td>
</tr>
<tr>
<td>Support workers</td>
<td>Non-creative occupations in non-creative industries</td>
<td>Total employment in creative industries</td>
</tr>
<tr>
<td>Total creative workforce</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Given the dominance of commercial jobs in MPAC, currently and into the future, there are significant opportunities to grow creative Industries in MPAC. There were only a modest number of arts and recreation jobs (100) in 2016, however, the scale of commercial operations suggests that there would be a significant number of embedded creatives, who are responsible for graphic design, publishing and other creative tasks, in house. As the commercial sector grows, creative industry organisations may start to shift to Moonee Ponds to service the significant commercial sector.

An important consideration for creative industries is that they need flexible spaces, that are adaptable and allow for a range of uses. Creative industries often occupy spaces as well, i.e. Sites that are slated for redevelopment in the future but have lengthy period of vacancy.
Another important consideration is that usually they are emerging or experimental sectors of the economy and therefore have the lowest capacity to pay market rents. This is related to why creative industries are typically attracted to older, adaptive industrial areas. There is not a lot of this type of building stock present in Moonee Ponds, and new developments often don't provide suitable floor space for creative industries; they lack flexibility, adaptability and are often at prohibitive rental prices.

Creative industries often require affordable tenancies. This can be achieved through the presence of a range of different types of ownership and a range of different building typology being present, as this allows for rental variation. This means that new creative agencies can start up in an affordable space on the margins of MPAC, and if successful could expand into the core of the centre. Single use and single ownership structures are less attractive to creative industries and are frequently unaffordable.

Roles for Moonee Valley City Council in fostering creative industries in MPAC are

- Supporting the retention of old buildings, making sure they are adaptable and flexible,
- Ensuring mix of urban forms and spaces within MPAC
- Supporting transitional uses through liaison with landowners

Creative industries can also be overtly supported through programs like renew Newcastle, where vacant land is occupied by creative businesses.

5.2 Business start ups and enterprises /microbusinesses

A lot of creative industries are also business start ups, and therefore the conditions required to foster creative industries are similar to those for start ups. Business start ups have some additional requirements, including high speed internet and co-working spaces.

Co-working spaces are a viable prospect for MPAC as they are suited to a range of floorplate sizes. They can form a range of different formats/industries, including offices and creative uses and small scale urban manufacturing. Co-working and shared spaces are also suited to transitional land uses. Start ups are an important contributor to local outcomes - typically local workers are employed, and this contributes to strengthening the local economy.

Roles for Council in supporting shared and co-working spaces include

- Establishing incubators and grant programs to attract enterprise
- Identifying suitable buildings for these activities and liaising with land owners
- Supporting transitional uses through liaison with land owners

A key emerging challenge (and potential opportunity) for MPAC appears to be home-based businesses. There are many reasons why businesses tend to operate out of homes. Those include:

- Start ups; which tend to have unpredictable and low cash flows in their early years - preventing them from signing leases or committing to larger investment
- Labour intensity; little need for large floorplates to accommodate machinery
- No benefits from economies of scale, reducing the need for those businesses to grow in number of employees and leaving the business owner as the sole operator
- No need for main street frontages; exposure to passing trade/traffic is not required (or significant) for marketing or sales
- The homes themselves possess some locational advantages; a significant factor in the City of Moonee Valley with dwellings being better located in terms of access to customers and suppliers than most employment lands across the State

The most common home-based businesses are in professional services, arts, health and retail. More capital intensive industries such as manufacturers, printers and wholesalers benefit from economies of scale and more operating space and are less likely to operate out of homes.
5.3 Health sector

The health sector is expected to experience significant demand side pressures for growth due to a growing (and aging) population. This will not only necessitate significant investment in the core health care system, but also likely result in a broadening of the sector overall with strong demand for allied and support services to complement super-specialisation at the top end of the sector.

As a result, the sector is expected to have two growth fronts:

i. Local health services (i.e. General Practitioners) which will be evenly distributed across the metropoles and follow broad population and employment growth patterns. They will increasingly form a sizable component of local retail strips; and

ii. Regional level services (including hospitals and medical specialists) which will increasingly be clustered around major medical nodes as specialisation drives innovation.

The exception is private health care in affluent areas with ageing local population catchments, where there is often sufficient demand for certain types of medical specialists to support small clusters of specialist clinics.

Currently there are very few health related jobs in MPAC, and there are no large anchor institutions (hospitals, rehabilitation centres) which would work to attract allied and support services. In contrast, the Footscray and Box Hill Activity Centres already have health related jobs, and Box Hill has several key institutions, which suggests health sector jobs will continue to increase in these areas.

There is a spectrum of health services, and MPAC could foster health services further along the spectrum. While it is unlikely to attract higher order anchor institutions, there is still a range of other services that could be contained in the centre, including local GP clinics and scaling up to a pathology centre. There is still a lot of opportunity for this type of employment, particularly in light of the increased health needs associated with an aging population.

Key roles for Council in supporting development of health services in MPAC pertain to management of the public realm as well as seeking active frontages for health services. These issues need to be managed appropriately.

---

3 Hospital beds and highly trained medical specialists
4 Super-specialisation is the growing trend in the health sector where medical professional's specialise in narrowing sub-specialisations in order to focus their efforts and deepen their knowledge on particular medical conditions in specific components of the human anatomy. The most highly regarded medical experts are now super-specialists.
5.4 Retail and hospitality

Acting as a primary shaper of local activity, the retail and hospitality sector has and will continue to evolve significantly. The composition of retail offers will continue to evolve to match consumer preferences and products. Major trends include:

- **Online retail**: a well-known phenomenon by 2015, online retail is significant in terms of marketing as well as distribution. Whilst sales can now occur online for almost any type of product (groceries were the fastest growing commodity for online sales in 2014), the ability to market a brand online is now the primary means of attracting new business whilst also keeping existing and past customers engaged. This is particularly important for apparel, where bricks and mortar retailers need to offer more than just a basic commodity.

- **Casualisation of hospitality**: a more subtle but no less important issue is the growing popularity of casual dining as a substitute for fine-dining. Casual dining still offers quality food but at a more reasonable price. In some cases it is also more amenable to opportunities for social interaction. In many communities, this superior value proposition is important for households which have been under economic pressures since the Global Financing Crisis.

- **Evolution of supermarkets**: over the past decade, the entry and growth of Aldi and Costco in the Victorian retail economy has created some significant disruption to the traditional duopoly of Woolworths and Coles. As with all disruptions, competition drives innovation, and we are now seeing Woolworths and Coles working harder with their suppliers to evolve their offers beyond basic groceries that Aldi can offer at better prices. The major supermarkets are now selling convenience meals to compete with fast food outlets and packaged meals and recipes to compete with family restaurants.

Retail jobs in MPAC are expected to grow significantly between 2016 and 2040, however they only represent approximately 25 per cent of all jobs. The existing shopping centre (Moonee Ponds Central) and supermarkets are likely to capture much of this growth. This suggests that MPAC is well placed to adapt to a shifting retail and hospitality landscape.

Physical retail has to have a high quality experience and will increasingly have a service focus, and Council has an important role in supporting the development of an attractive and high quality public realm within MPAC. Currently there are few opportunities for al fresco dining and there are no pedestrian malls. Other parts of Melbourne including Oakleigh and St Kilda have been highly successful in creating pedestrian malls that offer a high quality retail experience to their community.

Council also has an important role in activating a night-time economy in MPAC. This can be through reviewing opening hours, hosting night markets and other evening events.
5.5 Key findings

Given the dominance of commercial jobs in MPAC, currently and into the future, there are significant opportunities to grow creative industries in MPAC. This growth could include ‘embedded creatives’ working in non-creative organisations and migration of creative organisations to MPAC to service the needs of the commercial sector.

Supporting start up businesses in MPAC will foster greater diversity in the employment offering, and the MPAC is well placed to incorporate a start up cluster. This is also particularly relevant given the growth forecast for commercial jobs.

The fragmented small and medium sized lot sizes that are found within MPAC also lend themselves well to creative and start up enterprises.

There is little potential for MPAC to evolve into a health cluster in the absence of any significant health anchor organisation, such as a hospital or rehabilitation centre.

The retail and hospitality sector is expected to continue to grow, however MPAC is not anticipated to become a major retail cluster.
6. ECONOMIC GROWTH FORECASTS FOR MPAC

This chapter describes the employment forecasts for MPAC to 2040. Population and dwelling forecasts are also provided for context.

6.1 Moonee Valley Economic Growth

Moonee Valley has experienced strong employment growth over the past ten years, adding 12,000 jobs between 2006 and 2016. As shown in Table 8, this strong rate of growth is expected to continue, with employment in Moonee Valley reaching 77,500 jobs by 2040, which is double that of 2006.

As a key employment hub of the North-Western region, it is unsurprising that forecasts show a higher rate of employment growth than that of population, indicating a net inflow of workers. This is driven by a variety of factors which include:

- Proximity to the CBD
- High accessibility across the municipality
- The presence of renewal areas such as Airport West and the Moonee Valley Racecourse
- Rapidly developing greenfield regions in adjacent LGAs

<table>
<thead>
<tr>
<th>TABLE 8: EMPLOYMENT GROWTH OVERVIEW AND CONTEXT INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Employment</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>Change</td>
</tr>
<tr>
<td>Annual growth rate</td>
</tr>
<tr>
<td>Context Indicators</td>
</tr>
<tr>
<td>Local pop to job ratio¹</td>
</tr>
<tr>
<td>Share of Melbourne²</td>
</tr>
</tbody>
</table>

Source: SGS Economics and Planning, 2018

Employment growth is expected to be strongest along the transport corridor spanning from Flemington to Airport West. MPAC is the activity centre which has the best connection to the CBD and access to labour markets, and will accommodate much of the municipality’s economic growth in the short term, through a combination of development intensification, and the attraction of more efficient businesses. The northern centres of Airport West and Essendon Fields will also experience strong growth, albeit in later years.

Low levels of commercial employment growth are also expected across the remainder of the municipality, including areas which are primarily residential. This represents a variety of jobs ranging from home businesses to local convenience stores.
6.2 Employment forecasts

Between 2016 and 2040, employment in the Moonee Ponds Activity Centre is predicted to grow by around 6,800 jobs (or a 97 per cent increase). Commercial and institutional employment are predicted to increase their percentage share of total employment, while retail and industrial are both predicted to reduce their share by 2 per cent.

MPAC is expected to absorb 21 per cent of jobs growth across Moonee Valley between 2016 and 2040.

<table>
<thead>
<tr>
<th>Year</th>
<th>Retail No.</th>
<th>Retail %</th>
<th>Commercial No.</th>
<th>Commercial %</th>
<th>Industrial No.</th>
<th>Industrial %</th>
<th>Institutional No.</th>
<th>Institutional %</th>
<th>Total No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>1,654</td>
<td>24%</td>
<td>4,151</td>
<td>59%</td>
<td>459</td>
<td>5%</td>
<td>908</td>
<td>13%</td>
<td>7,037</td>
</tr>
<tr>
<td>2040</td>
<td>3,047</td>
<td>22%</td>
<td>8,257</td>
<td>60%</td>
<td>442</td>
<td>7%</td>
<td>2,091</td>
<td>15%</td>
<td>13,837</td>
</tr>
</tbody>
</table>

Source: Small Area Land Use Projections, 2017/18

Source: Small Area Land Use Projections, 2017/18

Economic report for MPAC Pilot Project 27
As shown in Figure 13 and Figure 14, the largest predicted increase in employment is in the commercial sector, which is expected to almost double in the number of jobs. Industrial employment is predicted to remain at a minimum level, while institutional and educational employment is predicted to grow moderately.

**FIGURE 13:** MPAC CHANGE IN EMPLOYMENT BY INDUSTRY GROUP; 2016 – 2040

Source: South Area Land Use Projections; 2012/13

### 6.1 Employment floorspace

There is no employment lands audit available for the City of Moonee Valley. Therefore, current employment floorspace or locally specific job to floorspace ratios cannot be determined. For this reason, SGS has applied high level employment to floorspace ratios to provide a reasonable estimate of the likely amount of employment floorspace required by the forecast employment by industry.

The assumed average job to floorspace ratios are based on land use studies in other municipalities and market experience.

Assumed average job to floorspace ratios are as follows:

<table>
<thead>
<tr>
<th>Sector</th>
<th>Job to gross floorspace ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial</td>
<td>65</td>
</tr>
<tr>
<td>Retail</td>
<td>25</td>
</tr>
<tr>
<td>Commercial</td>
<td>20</td>
</tr>
<tr>
<td>Institutional</td>
<td>50</td>
</tr>
</tbody>
</table>

Source: SGS Economics and Planning

The results generated using the assumed job to floorspace ratios were sense checked against rates data for the MPAC. The rates database showed there is currently 153,000 square metres of gross employment floorspace within MPAC. Using the assumed job to floorspace ratios listed above, almost 170,000 square metres of floorspace was identified. This indicates a difference of approximately 10% which is not considered significant.
Council rates database does not provide an exact figure for the amount of employment floorspace in the municipality. This is due to some non-employment land uses hosting employment, such as people working out of residential dwellings. The application of assumed job to floorspace ratios also does not provide an exact figure as it is based on averages and not a land use audit. However, the small variation between the total amount of employment floorspace recorded in the rates database and the total amount of employment floorspace estimated using average jobs to floorspace ratios indicates this is a relatively robust figure. It is therefore considered a reliable estimate of the total amount of floorspace in MPAC.

Due to the minimal variation from the total employment floorspace recorded in the rates database, all results reported are based on job to floorspace ratios.

Figure 14 and Table 9 illustrate the growth in floorspace demand between 2016 and 2040. They show that demand for retail and commercial floorspace will increase substantially.

**Figure 14:** MPAC change in floorspace demand by industry group: 2016 – 2040

**Table 9:** MPAC employment floorspace forecasts: 2016 – 2040 – medium density (average jobs to floorspace ratio)

<table>
<thead>
<tr>
<th>Year</th>
<th>Retail</th>
<th>Commercial</th>
<th>Industrial</th>
<th>Institutional</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>41,347</td>
<td>96,971</td>
<td>21,056</td>
<td>10,523</td>
<td>169,898</td>
</tr>
<tr>
<td>2040</td>
<td>76,188</td>
<td>194,424</td>
<td>25,706</td>
<td>33,341</td>
<td>339,661</td>
</tr>
<tr>
<td>Change</td>
<td>34,841</td>
<td>97,453</td>
<td>7,652</td>
<td>20,818</td>
<td>160,763</td>
</tr>
</tbody>
</table>

*Source: SGS Economics and Planning, 2018*

In terms of the quantum of gross floorspace demanded, there is expected to be demand for over 160,000 square metres of new employment floorspace between 2016 and 2040. More than half of this is expected to be in commercial employment floorspace. There is also expected to be demand for almost 35,000 square metres of retail floorspace and more than 20,000 square metres of institutional floorspace.

### 6.2 Scenario testing

In recognition of the difficulty in predicting the precise nature and quantum of future floorspace requirements with a high degree of accuracy, three employment scenarios have
been conducted. The three scenarios assume below average, average and above average jobs to floorspace ratios.

The average floorspace ratios are listed in Table 8. The below average jobs to floorspace ratio scenario assumes a 20 per cent lower ratio than the average, where each job requires 20 per cent less gross floorspace than the average. The above average jobs to floorspace ratio assumes a 20 per cent higher ratio than the average, where each job requires 20 per cent more gross floorspace than the average.
**TABLE 10: COMPARISON OF EMPLOYMENT SCENARIOS**

<table>
<thead>
<tr>
<th>Additional floorspace 2016-2040</th>
<th>Above average floorspace per job ratio</th>
<th>Average floorspace per job ratio</th>
<th>Below average floorspace per job ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>42,899</td>
<td>34,841</td>
<td>27,873</td>
</tr>
<tr>
<td>Commercial</td>
<td>116,944</td>
<td>97,453</td>
<td>79,962</td>
</tr>
<tr>
<td>Industrial</td>
<td>5,182</td>
<td>7,652</td>
<td>6,122</td>
</tr>
<tr>
<td>Institutional</td>
<td>74,782</td>
<td>70,818</td>
<td>16,604</td>
</tr>
<tr>
<td>Total</td>
<td>212,916</td>
<td>160,763</td>
<td>128,610</td>
</tr>
</tbody>
</table>

*Source: SES Economics and Planning, 2018*

Forecasts by ANZIC code (which provide more detailed insight into specific industries) is outlined in Appendix A. A breakdown of statistical areas used for the forecasts are also included in Appendix A.
6.3 Population forecasts

Based on SGS forecasts that have been aligned to the population forecasts for Moonee Ponds included in the MV2040 plan, the residential population of MPAC is expected to increase from approximately 3,500 people to between 10,800 and 11,600 people between 2018 and 2040, more than tripling its population.

The number of teenagers (12 to 17 year old) is expected to grow at an average rate of 6.9 per cent per year, while the number of those over 65 is expected to grow at an average annual rate 6.6 per cent. Growth in young adults (18 to 24) is expected to be the slowest at 4.6 per cent. The growth in residents by age group is illustrated in Figure 15.

The method used by SGS in developing population forecasts is outlined in Appendix B.

Note on method: SGS small area forecasts for Moonee Ponds and MPAC were identified for 2018 and for 2040. The percentage of dwellings and population that were located in MPAC were then calculated. The total population and dwelling numbers listed for Moonee Ponds in MV 2040 were used as a benchmark, and the proportion of dwellings and population identified for MPAC using SGS forecasts were applied to the MV2040 figures. This was undertaken to ensure alignment with population and dwelling forecasts used in the MV2040 document.

![Growth Forecasts: 2016 - 2040](image)

Source: Small Area Land Use Projections, 2017/18

The forecasts indicate that in 2018 there are currently 1,652 dwellings in MPAC. This is expected to grow to between 5,440 and 5,800 dwellings by 2040. This means between 2018 and 2040, there are expected to be between 3,788 and 4,152 additional dwellings by 2040 in MPAC, an almost three fold increase.

The Moonee Valley Racing Club is located within MPAC. It has been identified for redevelopment and the Moonee Valley Racing Club master plan indicates that it will deliver in the order of 2,000 dwellings.
6.4 Key findings

Between 2016 and 2040, the number of jobs in MPAC is expected to almost double, to approximately 14,000 jobs. Almost 4,000 of these jobs are forecast to be in the commercial sector, and more than a 1,000 are forecast in the retail sector. MPAC is expected to accommodate more than 20 per cent of jobs growth within the municipality between 2016 and 2040.

However, in order to accommodate these jobs, opportunities will need to be identified for attracting and supplying large floorplate commercial tenancies.

Current zoning allows for residential development to compete with commercial development and is currently a more profitable option. The tripling of the population of MPAC by 2040 reinforces the attractiveness of residential development in MPAC, although a proportion of this growth will be absorbed within the Moonee Valley Race Course development. Council will need to identify suitable interventions to foster employment growth in light of the high demand for residential development in MPAC.
APPENDICES

Appendix A: Data tables

TABLE 11: EMPLOYMENT FORECASTS BY ANZSIC CODE

<table>
<thead>
<tr>
<th>ANZSIC Group</th>
<th>2016</th>
<th>2040</th>
<th>Growth 2016-2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Forestry and Fishing</td>
<td>3</td>
<td>3</td>
<td>-1</td>
</tr>
<tr>
<td>Mining</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>97</td>
<td>55</td>
<td>-42</td>
</tr>
<tr>
<td>Electricity, Gas, Water and Wastewater</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Construction</td>
<td>135</td>
<td>282</td>
<td>147</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>15</td>
<td>99</td>
<td>-14</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>957</td>
<td>2,037</td>
<td>1,080</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>500</td>
<td>760</td>
<td>250</td>
</tr>
<tr>
<td>Transport, Postal and Warehousing</td>
<td>54</td>
<td>63</td>
<td>9</td>
</tr>
<tr>
<td>Information Media and Telecommunications</td>
<td>156</td>
<td>229</td>
<td>73</td>
</tr>
<tr>
<td>Financial and Insurance Services</td>
<td>302</td>
<td>834</td>
<td>532</td>
</tr>
<tr>
<td>Rental, Hiring and Real Estate Services</td>
<td>11</td>
<td>68</td>
<td>57</td>
</tr>
<tr>
<td>Professional, Scientific and Technical Services</td>
<td>435</td>
<td>1,790</td>
<td>1,314</td>
</tr>
<tr>
<td>Administrative and Support Services</td>
<td>1,005</td>
<td>3,115</td>
<td>2,110</td>
</tr>
<tr>
<td>Public Administration and Safety</td>
<td>2,225</td>
<td>3,321</td>
<td>1,096</td>
</tr>
<tr>
<td>Education and Training</td>
<td>104</td>
<td>96</td>
<td>8</td>
</tr>
<tr>
<td>Health Care and Social Assistance</td>
<td>697</td>
<td>1,464</td>
<td>767</td>
</tr>
<tr>
<td>Arts and Recreational Services</td>
<td>181</td>
<td>124</td>
<td>24</td>
</tr>
<tr>
<td>Other Services</td>
<td>197</td>
<td>250</td>
<td>53</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>7,037</td>
<td>13,837</td>
<td>6,800</td>
</tr>
</tbody>
</table>

Source: SGS Small Area Forecasts, 2018

TABLE 12: FLOORSPACE DEMAND 2035 BY SAI LOCATED WITHIN MPAC

<table>
<thead>
<tr>
<th>SAI</th>
<th>Retail</th>
<th>Commercial</th>
<th>Industrial</th>
<th>Institutional</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>20603111605</td>
<td>20,711</td>
<td>35,594</td>
<td>6,873</td>
<td>2,937</td>
<td>66,059</td>
</tr>
<tr>
<td>20603111607</td>
<td>1781</td>
<td>1,628</td>
<td>1,665</td>
<td>278</td>
<td>5,142</td>
</tr>
<tr>
<td>20603111611</td>
<td>870</td>
<td>1,171</td>
<td>2,004</td>
<td>240</td>
<td>5,285</td>
</tr>
<tr>
<td>20603111623</td>
<td>7,017</td>
<td>2,410</td>
<td>2,870</td>
<td>192</td>
<td>11,499</td>
</tr>
<tr>
<td>20603111624</td>
<td>5,009</td>
<td>28,393</td>
<td>2,338</td>
<td>1,590</td>
<td>37,130</td>
</tr>
<tr>
<td>20603111625</td>
<td>5,869</td>
<td>16,907</td>
<td>3,689</td>
<td>1,793</td>
<td>32,259</td>
</tr>
<tr>
<td>20603111628</td>
<td>6,497</td>
<td>8,428</td>
<td>2,493</td>
<td>667</td>
<td>18,088</td>
</tr>
<tr>
<td>20603111630</td>
<td>90</td>
<td>640</td>
<td>114</td>
<td>2,485</td>
<td>3,440</td>
</tr>
</tbody>
</table>

Total 43,347 96,571 21,056 10,523 189,898

Source: SGS Small Area Forecasts, 2018
TABLE 13: FLOORSPACE DEMAND 2040 BY SA1 LOCATED WITHIN MPAC

<table>
<thead>
<tr>
<th>SA1</th>
<th>Retail</th>
<th>Commercial</th>
<th>Industrial</th>
<th>Institutional</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>20603111605</td>
<td>34,903</td>
<td>59,883</td>
<td>7,390</td>
<td>4,562</td>
<td>106,735</td>
</tr>
<tr>
<td>20603111607</td>
<td>2,795</td>
<td>7,806</td>
<td>2,112</td>
<td>851</td>
<td>12,569</td>
</tr>
<tr>
<td>20603111611</td>
<td>1,602</td>
<td>3,082</td>
<td>1,347</td>
<td>464</td>
<td>6,495</td>
</tr>
<tr>
<td>20603111623</td>
<td>2,800</td>
<td>6,591</td>
<td>3,461</td>
<td>757</td>
<td>13,994</td>
</tr>
<tr>
<td>20603111624</td>
<td>7,540</td>
<td>61,625</td>
<td>2,457</td>
<td>12,436</td>
<td>80,508</td>
</tr>
<tr>
<td>20603111625</td>
<td>11,647</td>
<td>13,751</td>
<td>6,008</td>
<td>7,117</td>
<td>36,603</td>
</tr>
<tr>
<td>20603111628</td>
<td>10,502</td>
<td>16,776</td>
<td>1,018</td>
<td>1,180</td>
<td>30,978</td>
</tr>
<tr>
<td>20603111639</td>
<td>4,517</td>
<td>4,970</td>
<td>4,915</td>
<td>9,939</td>
<td>18,341</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75,188</strong></td>
<td><strong>194,424</strong></td>
<td><strong>28,708</strong></td>
<td><strong>31,341</strong></td>
<td><strong>330,861</strong></td>
</tr>
</tbody>
</table>


TABLE 14: GROWTH IN FLOORSPACE DEMAND 2016-2040 BY SA1 LOCATED WITHIN MPAC

<table>
<thead>
<tr>
<th>SA1</th>
<th>Retail</th>
<th>Commercial</th>
<th>Industrial</th>
<th>Institutional</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>20603111605</td>
<td>14,195</td>
<td>24,289</td>
<td>517</td>
<td>1,645</td>
<td>40,640</td>
</tr>
<tr>
<td>20603111607</td>
<td>2,507</td>
<td>6,178</td>
<td>447</td>
<td>573</td>
<td>9,725</td>
</tr>
<tr>
<td>20603111611</td>
<td>732</td>
<td>5,911</td>
<td>343</td>
<td>234</td>
<td>3,210</td>
</tr>
<tr>
<td>20603111623</td>
<td>673</td>
<td>4,584</td>
<td>591</td>
<td>200</td>
<td>5,848</td>
</tr>
<tr>
<td>20603111624</td>
<td>2,531</td>
<td>23,432</td>
<td>119</td>
<td>10,846</td>
<td>33,836</td>
</tr>
<tr>
<td>20603111625</td>
<td>5,778</td>
<td>14,884</td>
<td>319</td>
<td>3,364</td>
<td>22,245</td>
</tr>
<tr>
<td>20603111628</td>
<td>4,005</td>
<td>7,848</td>
<td>525</td>
<td>513</td>
<td>12,863</td>
</tr>
<tr>
<td>20603111629</td>
<td>4,427</td>
<td>4,391</td>
<td>4,791</td>
<td>4,454</td>
<td>15,161</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34,841</strong></td>
<td><strong>97,453</strong></td>
<td><strong>7,652</strong></td>
<td><strong>20,818</strong></td>
<td><strong>163,763</strong></td>
</tr>
</tbody>
</table>


TABLE 15: EMPLOYMENT 2016 BY SA1 LOCATED WITHIN MPAC

<table>
<thead>
<tr>
<th>SA1</th>
<th>Retail</th>
<th>Commercial</th>
<th>Industrial</th>
<th>Institutional</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>20603111605</td>
<td>828</td>
<td>1,472</td>
<td>106</td>
<td>367</td>
<td>2,772</td>
</tr>
<tr>
<td>20603111607</td>
<td>11</td>
<td>13</td>
<td>26</td>
<td>25</td>
<td>74</td>
</tr>
<tr>
<td>20603111611</td>
<td>35</td>
<td>41</td>
<td>15</td>
<td>23</td>
<td>114</td>
</tr>
<tr>
<td>20603111623</td>
<td>81</td>
<td>99</td>
<td>44</td>
<td>32</td>
<td>256</td>
</tr>
<tr>
<td>20603111624</td>
<td>200</td>
<td>1,276</td>
<td>36</td>
<td>166</td>
<td>1,878</td>
</tr>
<tr>
<td>20603111625</td>
<td>225</td>
<td>813</td>
<td>57</td>
<td>1,273</td>
<td>1,470</td>
</tr>
<tr>
<td>20603111628</td>
<td>260</td>
<td>350</td>
<td>38</td>
<td>85</td>
<td>733</td>
</tr>
<tr>
<td>20603111629</td>
<td>4</td>
<td>30</td>
<td>2</td>
<td>52</td>
<td>87</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,654</strong></td>
<td><strong>4,151</strong></td>
<td><strong>324</strong></td>
<td><strong>908</strong></td>
<td><strong>7,037</strong></td>
</tr>
</tbody>
</table>

### Table 16: Employment Forecast 2040 by SA1 located within MPAC

<table>
<thead>
<tr>
<th>SA1</th>
<th>Retail</th>
<th>Commercial</th>
<th>Industrial</th>
<th>Institutional</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>20603111605</td>
<td>1,396</td>
<td>2,501</td>
<td>114</td>
<td>585</td>
<td>4,595</td>
</tr>
<tr>
<td>20603111607</td>
<td>112</td>
<td>225</td>
<td>32</td>
<td>122</td>
<td>551</td>
</tr>
<tr>
<td>20603111611</td>
<td>66</td>
<td>101</td>
<td>21</td>
<td>63</td>
<td>259</td>
</tr>
<tr>
<td>20603111613</td>
<td>108</td>
<td>709</td>
<td>53</td>
<td>97</td>
<td>525</td>
</tr>
<tr>
<td>20603111624</td>
<td>302</td>
<td>2,883</td>
<td>38</td>
<td>447</td>
<td>3,669</td>
</tr>
<tr>
<td>20603111625</td>
<td>466</td>
<td>1,776</td>
<td>62</td>
<td>457</td>
<td>3,801</td>
</tr>
<tr>
<td>20603111628</td>
<td>420</td>
<td>601</td>
<td>46</td>
<td>237</td>
<td>1,304</td>
</tr>
<tr>
<td>20603111639</td>
<td>181</td>
<td>177</td>
<td>76</td>
<td>100</td>
<td>548</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,047</strong></td>
<td><strong>9,257</strong></td>
<td><strong>442</strong></td>
<td><strong>2,091</strong></td>
<td><strong>13,837</strong></td>
</tr>
</tbody>
</table>

Source: SGS Small Area Forecasts, 2018

### Table 17: Growth in Employment 2015-2040 by SA1 located within MPAC

<table>
<thead>
<tr>
<th>SA1</th>
<th>Retail</th>
<th>Commercial</th>
<th>Industrial</th>
<th>Institutional</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>20603111605</td>
<td>588</td>
<td>1,030</td>
<td>8</td>
<td>217</td>
<td>1,823</td>
</tr>
<tr>
<td>20603111607</td>
<td>100</td>
<td>192</td>
<td>7</td>
<td>127</td>
<td>428</td>
</tr>
<tr>
<td>20603111611</td>
<td>29</td>
<td>60</td>
<td>5</td>
<td>40</td>
<td>135</td>
</tr>
<tr>
<td>20603111621</td>
<td>72</td>
<td>199</td>
<td>9</td>
<td>75</td>
<td>375</td>
</tr>
<tr>
<td>20603111624</td>
<td>101</td>
<td>1,608</td>
<td>2</td>
<td>281</td>
<td>1,992</td>
</tr>
<tr>
<td>20603111625</td>
<td>231</td>
<td>628</td>
<td>5</td>
<td>219</td>
<td>1,081</td>
</tr>
<tr>
<td>20603111626</td>
<td>160</td>
<td>251</td>
<td>8</td>
<td>152</td>
<td>571</td>
</tr>
<tr>
<td>20603111629</td>
<td>378</td>
<td>148</td>
<td>74</td>
<td>103</td>
<td>645</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,394</strong></td>
<td><strong>4,105</strong></td>
<td><strong>118</strong></td>
<td><strong>1,184</strong></td>
<td><strong>6,800</strong></td>
</tr>
</tbody>
</table>

Source: SGS Small Area Forecasts, 2018
Appendix B: Small Area Model

SAM Model Population Forecasts

SGS maintains a Small Area Model (SAM) which includes population forecasts across the state. This was used to understand the current and projected population profile at MPAC, and to understand how the existing population compared to other activity cities analysed in this study. Population forecasts are developed from dwelling forecasts. In this study, only population forecasts were included, as ID Forecast has developed dwelling forecasts that are applied across all Council documents.

Structural Private Dwellings

Dwellings (i.e. occupied and unoccupied dwellings) is the first variable estimated, as this is the most reliable source of supply level data.

- VIF16 dwelling projections by SA2 forms the base control totals for SAM
- A base year (2011 to 2016) travel zone level dwelling estimate is then created based on 2014 Housing Development Data (HDD) and ABS 2011 Census data.
- A wide range of local level development datasets (such as the Urban Development Program and Precinct Structure Plans (PSP) information) is consolidated into a single travel zone level database. This also includes density/growth by location type assumptions to manage long term growth. Each input is also assigned a preferred timing and priority based on known developments and planning policy. SA2 control totals are then systematically distributed down to travel zones.
- The combination of top-down and bottom-up approaches mean that the resulting forecasts are consistent with regional trends, planning policy, and local supply information.

Population and demographic breakdowns

Dwellings are then systematically disaggregated to occupied private dwellings, population, and age groups. People in non-private dwellings (i.e. nursing homes, jails, hotels, etc) are also estimated and incorporated into the population and population by age projections.

- VIF16 dwelling, household and population by age projections by SA2 forms the base control totals for SAM model population and demographic breakdowns.
- 2011 ABS Census data is then aligned to travel zones and ratios (i.e. occupancy rates, household size, etc) are used to convert travel zone level dwelling data to population. Data is then benchmarked back to VIF16 control totals for each component.
- Travel zone ratios are then tressed toward SA2 ratios for each component over time, with some adjustments. This maintains travel zone variations while captures macro trends in dwelling, household and population. Data is then benchmarked back to VIF16 control totals for each component.
- For population by age an Iterative Proportional Fitting (IPF) approach is used to evolve the travel zone distribution over time to align to the SA2 control totals, while still reflect the variation at the travel zone level. Seed values for new residential locations are sourced from the respective local region.
SAM Model Employment Forecasts

SGS was commissioned to develop employment forecasts for the entire City of Moonee Valley as part of the development of a DCP. (refer to City of Moonee Valley Employment Forecasts, Technical Report). Employment by industry has been projected for the City of Moonee Valley and each Statistical Area 1 using a combination of macro-economic trend analysis (top down) and an analysis of local characteristics and competitive strengths (bottom up). The following key steps were undertaken to project employment and floor space:

- SGS maintains a Small Area Model (SAM) which includes employment forecasts across the state. This was used to understand regional economic trends and form a basis for the employment forecasts within Moonee Valley.
- Baselines forecasts for the City of Moonee Valley were then refined to capture the latest 2016 ABS Census employment data and to capture other local level supply side attributes.
- Revised employment forecasts for the City of Moonee Valley were then reviewed and translated into floor space estimates based on high level job to floorspace ratios.

SGS Small Area Model (SAM) Forecasts

The SGS SAM employment forecasts are derived as follows:

- Historical and base year employment by industry is recalibrated to adjust for undercount in raw ABS Census data (typically around 20 per cent, but varies across industries). This is done in two steps:
  - First, SGS systematically distributes geographically unallocated/undefined categories to a spatial location. This is done for 1 digit ANZSIC industries and across six geographic levels: Destination Zones, Statistical Area 2, Statistical Area 3, Statistical Area 4, Greater Capital City Statistical Areas, and State.
  - This corrects for spatial undercount in the census, and ensures that reallocations are at the most appropriate geographic level possible.
  - Next, this intermediate employment by industry estimate is further recalibrated at the state level based on the official ABS Labour Force Survey employment count.
  - This corrects for the non-spatial undercount in the census.

- Victoria and Greater Melbourne employment by industry is forecast using detailed trends analysis of employment by industry from the ABS Labour Force Survey, Census Journey to Work, projected workforce and analysis of major-economic factors regarding structural changes in the broader economy drawing on State and national publications. A number of indicator series are created to understand how the employment by industry projections align with recent trends, and align with key age segments (i.e. age cohorts).

- Greater Melbourne employment is then disaggregated to Statistical Area 3s using trend analysis and a range of indicator series to distribute employment by industry. This ensures population serving employment (i.e. retail, education, etc) is shifted to where population growth is forecast while the spatial distribution of other industries follows other locational drivers. A “new developments database” is also used to capture major renewal sites and policy interventions which shift employment from a base trend.

- Statistical Area 3 employment is then further disaggregated to SAM zones based on current trends and the “new development database” to capture key change areas.

Additional information on the SGS SAM is available [here](#).

---

5 e.g. Individuals who did not submit census forms, or inadequate industry of employment responses
6 e.g. Accessibility and supply of land
7 A SAM Zone is a geographic unit created by SGS. It can be aggregated up to standard ABS geographies such as Statistical Areas 3 and Suburbs and Local Government Areas.
Refinements to baseline employment forecasts

The SGS SAM baseline employment forecast has been reviewed and refined for the City of Moonee Valley based on the latest 2016 ABS Census employment data and local level supply side considerations. Local level refinements have been contained within broader macro-economic trends to ensure they remain realistic and robust. Key refinements include:

- Redevelopment of the Moonee Valley Racecourse
- Changing land uses within Airport West
- Supply constraints at school locations across Moonee Valley
- Supply constraints within existing health nodes (e.g. Essendon Private Hospital)
- Stronger education (tertiary and training) growth in major activity centres

Results have then been reviewed in detail to ensure density, growth rates, employment mix and growth share ratios present a robust economic narrative.

This includes a small amount of existing and projected employment growth within non-employment nodes. This is expected and a result of home-based businesses and other small scale employment uses that occur within residential areas.
MOONEE PONDS ACTIVITY CENTRE

AFFORDABLE HOUSING
ADVICE ON MPAC FLOOR AREA UPLIFT POLICY

FINAL
NOVEMBER 2019
Prepared for
Moonee Valley City Council
# TABLE OF CONTENTS

**EXECUTIVE SUMMARY**

1. **INTRODUCTION**
   1.1 Background 1
   1.2 Report structure 1

2. **PLANNING AND ECONOMIC MERIT**
   2.1 Types of development contributions 2
   2.2 Planning policy, value sharing and affordable housing 4
   2.3 Summary 5

3. **VICTORIAN PRECEDENTS FOR VALUE SHARING POLICIES**
   3.1 Recent examples of value sharing policies in Victoria 6
   3.2 DELWP Activity Centre Pilot Project 11
   3.3 Summary 13

4. **AN FaU POLICY FOR MPAC**
   4.1 Overarching principles 15
   4.2 Application 15
   4.3 Operation 16
   4.4 Types of public benefits 16
   4.5 Worked example 17
   4.6 Other matters 17
   4.7 Estimate of total potential contributions 18

**APPENDICES**

- Appendix 1: Examples of pre-scheduled rate for value sharing policies 19
- Appendix 2: Site sales and residual land value estimates 25
LIST OF FIGURES

FIGURE 1: MOONEE PONDS ACTIVITY CENTRE BOUNDARY 1
FIGURE 2: FRAMES FOR DEVELOPMENT CONTRIBUTIONS 2
FIGURE 3: FLOOR AREA RATIO VERSUS ENVIRONMENTAL CAPACITY 7
FIGURE 4: GROSS REALISATION VALUES PER SQUARE METRE 8
FIGURE 5: AMENDMENT C270 GRV PRECINCTS MAP 8
FIGURE 6: EXAMPLE CALCULATION FROM C270 GUIDELINE DOCUMENT 9
FIGURE 7: INITIAL PUBLIC BENEFIT CATEGORIES AND RATIOS FOR FISHERMANS BEND 10
FIGURE 8: RECOMMENDED DWELLING DENSITIES FOR FISHERMANS BEND 11
FIGURE 9: CALCULATION OF VALUE SHARING, GEORGES RIVER VPA POLICY 20
FIGURE 10: RESIDUAL LAND VALUE BY PRECINCT, GEORGES RIVER VPA POLICY 21
FIGURE 11: HURSTVILLE PRECINCTS FROM GEORGES RIVER VPA POLICY 21
FIGURE 12: KOGARAH PRECINCTS FROM GEORGES RIVER VPA POLICY 21
FIGURE 13: FORMULA FOR VALUATION METHOD OF CALCULATING LVC 22
FIGURE 14: CHARGES LEVIED UNDER LVC CODIFIED REGIME 23
FIGURE 15: EXAMPLE OF CHARGE DETERMINATION PRECINCT IN ACT LVC SCHEME 24

LIST OF TABLES

TABLE 1: WORKED EXAMPLE OF PUBLIC BENEFIT CONTRIBUTION CALCULATION IV
TABLE 2: RESIDUAL LAND VALUES PER SQUARE METRE GROSS FLOOR SPACE 16
TABLE 3: WORKED EXAMPLE OF PUBLIC BENEFIT CONTRIBUTION CALCULATION 17
TABLE 4: FAU POLICIES COMPARED 18
TABLE 5: POTENTIAL TOTAL CONTRIBUTIONS TO 2040 18
TABLE 6: GAIC RATES, 2018-19 19
TABLE 7: DEVELOPMENT SITE SALES AND RESIDUAL LAND VALUE ESTIMATES 25
EXECUTIVE SUMMARY

Moonee Valley City Council (Council) is proposing to introduce a Floor Area Uplift (FAU) policy for the Moonee Ponds Activity Centre (MPAC).

This report has been prepared to assist Council in the formulation of a FAU policy for MPAC.

Rationale
An FAU policy is a type of development contribution premised on value capture or value sharing. The rationale for the policy is as follows:

- Planning approvals for developments that exceed the as-of-right planning limits will increase the underlying land value (also referred to as the residual land value).
- In the absence of an FAU policy, this land value increase will either be capitalised into the land value (to the benefit of the land seller) or retained by the developer (as a super profit) or shared between those parties.
- As this value is created by a decision of the responsible authority, acting on behalf of the community, it is reasonable to capture the uplift for the benefit of that community.
- Councils can capture this value by implementing policies that establish a requirement for a public benefit contribution or 'licence fee' to be paid when approvals for additional development rights are sought.
- This contribution may be paid in cash or in kind and be deployed to the benefit of the broader community. Affordable housing would be an appropriate form of an in-kind contribution.
- The value of the contribution should be commensurate with the value of the additional development rights sought.
- Provided details of the operation of the FAU policy and the contribution rates are pre-notified, the policy will have no impact on development feasibility and the realisation of new development and is, therefore, an economically efficient reallocation of resources.

Precedents for value sharing and affordable housing
Value sharing policies are commonly used to secure affordable housing contributions in other jurisdictions including New South Wales, various cities in the US and Europe, and in London. However, these existing policies rarely describe the explicit link between the value created by the granting of additional or ‘bonus’ development rights and value to be captured for the broader community.

The FAU policy introduced to the Melbourne Planning Scheme by Amendment C270 in 2016 is an exception. Under the policy, the value of any additional development rights is calculated by reference to a table of values associated with different land uses and precincts. The total land value uplift from the additional floor space, calculated using this table, establishes the value of the public benefit the proponent is required to provide in return for an approval to build the additional floor space. The policy permits various types of public benefits, including affordable housing. Amendment C270 established a precedent for a ‘pre-scheduled’ approach to value sharing in planning for established areas in Victoria.

The recently gazetted planning controls for Fishermans Bend (Amendment GC80) adopt a similar approach whereby the granting of additional development rights is contingent on the provision of a commensurate public benefit. In this case a ‘gifting ratio’ approach is applied.
whereby the proponent is obliged to provide one social housing dwelling for every eight additional market dwellings approved on a site. In this case, social housing is the only form of public benefit that will be accepted.

**FAU policy for affordable housing in MPAC**

SGS recommends Council pursue a FAU policy for MPAC based on these precedents established by Amendment C270 and Amendment GC80.

The FAU policy would be a value sharing mechanism. The value of the public benefit contributions would reflect the additional value created through planning decisions that allows proponents to exceed the nominated FAR for a site.

For reasons of transparency and administrative efficiency, the FAU policy should be based on pre-scheduled rates for public benefits. Based on analysis of development site sales in MPAC, this rate has been calculated as $1,200 per gross square metre of additional residential floor space.

Council has indicated that it will set an upper limit on the FAU floor space that can be approved on any site of 0.5:1 FAR.

The FAU should only be permitted where it can be demonstrated that the proposed development complies with all other planning and amenity standards, and does not generate any unacceptable negative externalities, despite exceeding the FAR nominated for the site in question.

**Calculating FAU contributions**

The table below demonstrates how the public benefit contributions would be calculated for a hypothetical development site of 2,000 square metres and 4:1 FAR.

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Site area</td>
<td>2,000 sqm</td>
</tr>
<tr>
<td>2. Floor area ratio for site</td>
<td>4:1</td>
</tr>
<tr>
<td>3. Floor space permitted within grossed FAR (1 x 2)</td>
<td>8,000 sqm</td>
</tr>
<tr>
<td>4. Maximum floor area uplift</td>
<td>0:5:1</td>
</tr>
<tr>
<td>5. Maximum floor area uplift floor space</td>
<td>1,000 sqm</td>
</tr>
<tr>
<td>6. Gross floor space in proposed development with maximum FAU</td>
<td>9,000 sqm</td>
</tr>
<tr>
<td>7. Floor area uplift floor space (FAU) (6−3)</td>
<td>1,000 sqm</td>
</tr>
<tr>
<td>8. Public benefit contribution rate for MPAC</td>
<td>$1,200/sqm</td>
</tr>
<tr>
<td>9. Public benefit contribution required (7 x 8)</td>
<td>$1,200,000</td>
</tr>
</tbody>
</table>


**Deployment of FAU contributions**

In theory, contributions from proponents generated through the FAU policy could be used to the benefit of the broader community in a variety of ways. However, in this case Council has determined that it would prefer contributions are directed to affordable housing only.

We have estimated that by 2040 the policy could deliver up to $35 million in contributions or, provide up to 70 affordable housing dwellings, depending on how many sites take up the FAU opportunity.
1. INTRODUCTION

This chapter provides a brief overview of the purpose of this report.

1.1 Background

Council is considering an FAU policy for MPAC. The policy would permit additional floor space, above the prescribed FAR limits, where proponents provide affordable housing contributions in cash or in-kind. This policy follows precedents of value sharing policies recently established in both central Melbourne (through Amendment C270) and Fishermans Bend (through Amendment GC81).

The purpose of this report is to provide advice to assist Council in the formulation of an FAU policy for MPAC.

The area to which the proposed FAU policy would apply is shown in the figure below.

FIGURE 1: MOONEE PONDS ACTIVITY CENTRE BOUNDARY

Source: Hely + Co (2019) Moonee Ponds Activity Centre Built Form Framework

1.2 Report structure

The next chapter describes the planning and economic merits of an FAU policy. The subsequent chapter describes existing examples of the use of FAR and FAU policies in Victoria and highlights some key issues and considerations that influenced the development of these policies. The final chapter describes a proposed approach for the implementation of an FAU policy in MPAC.
2. PLANNING AND ECONOMIC MERIT

This chapter considers the merits and justification for introducing an FAU policy in MPAC.

2.1 Types of development contributions

FAU policies that have been implemented in central Melbourne and at Fishermans Bend involve the commercially sanctioned transfer of public benefits from a developer, in return for the granting of an approval that allows additional development rights that are in addition to the base or as-of-right allocation. These types of planning mechanisms are frequently referred to as development ‘bonus’ schemes.

It is important that the rationale for this type of development contribution is not confused with other types of contributions, and in particular transfers made under the Development Contribution Plan (DCP) provisions of the Planning and Environment Act 1987 (Act).

Overview

The term 'development contribution' is often used loosely in planning practice within Victoria. Moreover, the default usage of the term implies coverage by DCP provisions of the Act. However, the DCP provisions of the Act cover but one form of legitimately required development contribution.

Figure 2 summarises the complete range of situations where development contributions can reasonably be required of proponents. Note the cited frames are both additive and mutually exclusive.

FIGURE 2: FRAMES FOR DEVELOPMENT CONTRIBUTIONS

The 'value sharing' premise of an FAU policy

Regulation of land use and development through planning schemes in Victoria represents a form of restriction on market access necessitated by the objective of economic efficiency. A 'free for all', in say, the development of traffic generating shops, noise emitting warehouses or sunlight robbing towers is likely to create inferior streets, neighbourhoods and cities in terms of overall community welfare.

We therefore have deliberate and systematic rationing of development rights through planning regulations. Governments and communities sanction this rationing because it is expected to generate a net community benefit compared to allowing urban development to proceed on a laissez-faire basis.

However, by definition, this rationing routinely creates opportunities for monopoly rent (that is, higher return than if there were no restrictions or rationing).

These opportunities for extraction of monopoly returns are attached to particular sites. Accordingly, they are capitalised into the value of the land in question. Other things being equal, a piece of land which has latent or realised approval for the construction of a major shopping centre will be more valuable than land without this privileged access to retail centre development rights. Similarly, land approved for a multi-storey apartment building will be worth more than otherwise equivalent land designated for a single household dwelling, and so on.

In other markets where access is regulated or rationed in the interests of a better community outcome compared to open access (laissez faire), for example, liquor distribution, commercial fishing, radio and TV broadcasting, a licence fee is typically levied on the parties granted access by regulation.

An FAU policy clearly falls into the 'value sharing' frame.

Where public benefits are required by an FAU policy or in floor space 'bonus' mechanisms, they represent due consideration for the granting of access to development opportunities. They are tantamount to a licence fee, a belt, in the case of existing policies in Victoria (in central Melbourne and Fishermans Bend) the fee is delivered in-kind rather than a cash payment.

Whilst an FAU policy applies the fee to a marginal increase in development rights above some pre-determined base level, there is no reason, in principle, why Governments could not apply the requirement to a deeper quantum or, indeed, all of the development rights granted by the planning process. This is a matter of policy choice and program design.

As noted, without an FAU policy, the full value of the granted development rights will be capitalised into residual land values and will accrue to land owners. An FAU policy shares this uplift with the wider community. This is a normal and reasonable expectation of the workings of the planning system.

Development Contribution Plans - a form of user pays contribution

DCP payments are justified on the user pays principle. This requires proponents to contribute cash or in-kind towards infrastructure benefitting their project, with the contributions linked to the proportion of usage of the infrastructure items in question. A nexus between the development and an infrastructure item is established when residents, workers or visitors of the development make use of the planned facility, and fair cost apportionment is established by aligning the share of cost with the share of usage. Funds collected must be used for the delivery of the planned infrastructure or they must be returned to the current owners of the land which generated the user pays revenues. This is the accountability principle which underpins the DCP provisions.

The rationale for an FAU policy is separate from, and additive to, warranted DCP payments. It is also subject to different tests of reasonableness.
Other development contribution types: impact mitigation and inclusionary requirements

There are two further circumstances where proponents may be legitimately required to provide cash or in-kind contributions as part of a development approval process: impact mitigation and inclusionary requirements. These are also separate from, and additive to, value sharing obligations.

A proponent may be legitimately required to make compensatory payments or off-setting contributions to mitigate the unanticipated adverse effects of their project on the environment. For example, if a development incorporates significantly more site coverage and would therefore result in stormwater runoff that exceeds the parameters which had been built into an area wide contribution scheme (DCP) for drainage, that particular proponent may reasonably be requested to meet 100% of the cost of, say, an off-site retardation basin or tank to manage the additional flows. This requirement is premised on the 'exacerbator pays' principle where the perpetrator of the damage must meet the full cost of making it good (even though others may subsequently benefit from the off-site retention facility). This is clearly distinct from the 'user pays' principle where, as explained, costs are shared according to projected share of usage.

Inclusionary provisions are premised on minimum acceptable standards of development (however these might be defined) with the proponent having the option to fulfill the required performance standard on-site through a cash or in-kind contribution. Cash-in-lieu schemes have been operated for the fulfillment of car parking requirements for decades and are now formalised in the Victoria Planning Provisions (VPP). Cash payments in lieu of the provision of 5% (or more) of land for public open space upon approval of subdivision is another example of the 'inclusionary standards' premise for requiring cash or in-kind contributions from a development proponent. Again, this premise is quite different to the other rationales for requiring cash or in-kind contributions (user pays, value sharing and impact mitigation) and could reasonably be applied in addition to all three of these other measures.

2.2 Planning policy, value sharing and affordable housing

Planning policies that allow additional floor space in return for the provision of affordable housing are common to many jurisdictions. These policies are sometimes described using terms like ‘density bonus’ or ‘incentive zoning’. Despite differences in nomenclature, in each case access to additional floor space (that is additional development rights) is conditioned on the provision of affordable housing. These arrangements are premised on the principle of value capture or value sharing, that is, recognising that the granting of additional development rights effectively increases the residual land value of a site, and access to these additional rights is ‘priced’ via requirements to provide a pre-nominated form and quantum of affordable housing. Some specific examples are discussed below.

- In New South Wales a state-wide policy, SEPP Affordable Rental Housing Policy (2009), allows developers to include additional floor space in new developments if they include at least 20% affordable housing. If a development includes 50% affordable housing, an additional 0.5:1 of floor space is permitted in lower density developments and an additional 20% is permitted in higher density developments. A sliding scale formula reduces the amount of the bonus if a lower proportion of affordable housing is proposed.

- Waverley Municipal Council had a local planning policy that allowed a 15% floor space bonus to developers if 50% of the additional floor space was made available as affordable rental accommodation for a period of 3 years. Enforcement of these obligations was achieved via voluntary planning agreements. The policy has been replaced with a somewhat simplified approach that requires 5% of value uplift from any ‘bonus’ floor space to be directed towards affordable housing. Council has an affordable housing fund and uses the proceeds from the current policy to purchase properties.
New York City has a number of planning policies to facilitate affordable housing supply. The R10 program allows the maximum FAR of a development to be increased from 10:1 to 12:1 if affordable housing is provided. For each square foot of affordable housing provided, an additional 1.25 and 3.5 square feet of bonus floor space is allowed. The higher rate applies where the affordable housing is provided on-site as opposed to off-site. The Designated Areas program permits a 33% increase in the FAR if 20% of the building’s floor area (excluding ground-floor non-residential space) is provided for affordable housing. These programs apply to different locations and are complemented by other programs that include mandatory inclusionary housing requirements.

In San Francisco, the Analyzed State Density Bonus program allows an increase in density of up to 35% for projects that include 30% or more affordable housing units on-site, in eligible locations. The state of California requires local governments to offer density bonuses for affordable housing (see California Government Code Sections 65915–65918).

In Greater London, the level of affordable housing contributions is determined through a viability analysis at the planning application stage. The appropriate level of contributions is determined with reference to the impact on the feasibility of the development. In August 2017, the Greater London Authority provided a deemed-to-comply pathway whereby developers that commit to providing at least 35% affordable housing (of bedrooms rather than dwelling or floor space) can avoid the feasibility assessment requirement. The 35% requirement is split 30:70 between ‘social’ and ‘intermediate’ housing (being housing for high needs and moderate-income households respectively). The effective rate of social housing provision is therefore $35 \times 30\% = 10.5\%$. If the 35% requirement would make development unfeasible, developers can make their case for a lesser amount by submitting an open book feasibility assessment to the planning authority.

The recent adoption of similar planning policy approaches in Victoria are described in the next chapter.

2.3 Summary

This chapter has described the planning rationale for FAU policies. The key points that are relevant to the application of a similar framework in MPAC are as follows:

- An FAU policy falls within the value sharing rationale for seeking development contribution and is distinct from and additive to other types of contribution such as user-pays requirements arising from Development Contribution Plans.

- In granting an approval for an FAU, the responsible authority confers additional development rights on a site. Proponents of these developments are required to pay a ‘licence fee’ for these additional development rights.

- The value of the contribution should be commensurate with the uplift in land value created by the granting of the additional development rights.

- This type of value sharing policy is commonly used to secure contribution for affordable housing in other jurisdictions. However, these existing policies rarely prescribe an explicit link between the value created by the granting of addition or ‘bonus’ development rights and value captured for the community.

- This type of policy exists in central Melbourne (Amendment C270) although, for reasons to be discussed below, that particular policy is yet to deliver any affordable housing and is unlikely to do so in its current form.
3. VICTORIAN PRECEDENTS FOR VALUE SHARING POLICIES

This chapter provides an overview of existing policies which use FAR, FAU, value sharing and affordable housing mechanisms.

The state government-led Central City Built Form Review commenced in 2015 in response to concerns about the quality and scale of development in the central city. As a result of the review, Amendment C270 to the Melbourne Planning Scheme was prepared and adopted in 2016. Several features of Amendment C270 have influenced planning policies being contemplated for other locations. In particular, the use of FARs, FAU and value sharing arrangements.

The follow discussion examines these existing planning arrangements with FARs and FAU arrangements and associated with the provision of public benefits.

3.1 Recent examples of value sharing policies in Victoria

Central Melbourne

Amendment C270 to the Melbourne Planning Scheme introduced significant changes to the planning controls in central Melbourne. The amendment, approved in November 2016, saw the reintroduction of FAR planning controls and the introduction an FAU policy.

The adoption of Amendment C270 placed beyond doubt the principle that development rights are created and owned by the community rather than automatically vesting in the private owner of the development site.

Under the FAU policy, proponents of developments that exceed a 18:1 FAR are required to purchase those additional development rights from the approval authority. The price of development rights is set via pre-scheduled rates which reflect the residual land value per square metre of gross floor space in the precinct in question.

Having used these rates to determine the value of the additional development rights, the developer is required to deliver in-kind public benefits of equivalent value. Public benefits can include affordable housing to be transferred to registered providers, incorporation of through block links in the development, embellishments to local open space and improved public realm in the vicinity of the development site.

The justification for adopting an 18:1 FAR benchmark for the General Development Areas is outlined in the following extracts from Central City Built Form Synthesis Final Report:

- “The proposed allowable Floor Area Ratio on sites within the general development areas is 18:1. This aims to achieve two purposes:
  - Setting realistic and clear expectations about what a potential reasonable yield of a typical development site could be; and
  - Establishing a threshold density which triggers a value-sharing contribution towards community infrastructure.”

1 Central City Built Form Synthesis Final Report 2016, page 92.
There is no upper limit on FAU however height and setback controls and requirements to avoid overshadowing of public space work to establish the upper limit of acceptable densities.

**FIGURE 5: FLOOR AREA RATIO VERSUS ENVIRONMENTAL CAPACITY**

The Panel report on Amendment C270 noted that the 18:1 FAR was high but in the absence of an alternative proposal it was adopted:

- "The Panel considers that the 18:1 FAR provides a realistic expectation for yield ... The accompanying built form controls proposed should avoid the negative impacts that have been apparent with many recent developments. The Panel remains concerned, however, that an 18:1 FAR is high in comparison with other cities (especially if unlimited FAU applies). ... Given the adverse effects upon the public realm which have resulted from hyper-dense and high developments in recent times, especially much of Southbank and Elizabeth Street north) ... the Panel considers that a FAR of 18:1 in the General Development Area must be viewed as an absolute. Any future revision of the FAR should only look to lower this figure significantly."

**How are contributions under the FAU policy calculated?**

A guidelines document "How to calculate Floor Area Uplifts and Public Benefits" provides direction on the method of calculating the FAU contribution, the public benefits categories and methods for valuing each type of benefit.

The FAU contribution is calibrated to the residual land value (RLV) increase associated with the floor space that is above the 18:1 threshold. The calculation method set out in the guideline first estimates the Gross Realisation Value (GRV) of the additional floor space then calculates the RLV as 10% of the GRV. The guidelines include a map and schedule of rates that provides the GRV/RLV rates by precinct and land use (see Figure 4 and Figure 5).

These rates are subject to annual review to ensure they align with current land and property values. In this sense, the FAU policy is not a set-and-forget arrangement but one where there is a genuine attempt to calibrate the value of public benefits to the value created via the planning decision.
FIGURE 4: GROSS REALISATION VALUES PER SQUARE METRE

<table>
<thead>
<tr>
<th>Use</th>
<th>Eastern Core</th>
<th>North Eastern</th>
<th>Civic</th>
<th>Flagstaff</th>
<th>Western Core</th>
<th>Spencer</th>
<th>Southbank</th>
<th>Docklands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>$17,000</td>
<td>$14,000</td>
<td>$16,000</td>
<td>$17,000</td>
<td>$19,000</td>
<td>$13,000</td>
<td>$14,000</td>
<td>$14,000</td>
</tr>
<tr>
<td>Hospitality</td>
<td>$8,000</td>
<td>$8,000</td>
<td>$8,000</td>
<td>$8,000</td>
<td>$7,000</td>
<td>$4,000</td>
<td>$4,000</td>
<td>$4,000</td>
</tr>
<tr>
<td>Commercial</td>
<td>$9,000</td>
<td>$9,000</td>
<td>$7,000</td>
<td>$8,000</td>
<td>$2,000</td>
<td>$3,000</td>
<td>$8,000</td>
<td>$8,000</td>
</tr>
<tr>
<td>Residential</td>
<td>$9,000</td>
<td>$9,000</td>
<td>$8,000</td>
<td>$8,000</td>
<td>$8,000</td>
<td>$8,000</td>
<td>$8,000</td>
<td>$8,000</td>
</tr>
</tbody>
</table>


FIGURE 5: AMENDMENT C2790 GRO PRECINCTS MAP


What types of contributions are permitted? ²

² DelWP (2018) Melbourne C2790 How to calculate Floor Area Uplifts and Public Benefits November
Five explicit categories of public benefit area described:

- Publicly accessible open areas on site (additional to Clause 53.01 obligations)
- Publicly accessible enclosed areas within proposed building
- Affordable housing within proposed building
- Competitive design process for design of proposed building, and
- Strategically justified uses including Office on site or within proposed building.

The guidelines note that proposals for other types of public benefit will be considered if they are agreed to be of comparable relevance and value.

**FIGURE 6: EXAMPLE CALCULATION FROM C270 GUIDELINE DOCUMENT**

<table>
<thead>
<tr>
<th>Step</th>
<th>Calculation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Base Gross Floor Area (in floor area available based on a floor area ratio of 1:1)</td>
<td>Site Area x 1.0</td>
</tr>
<tr>
<td>2.</td>
<td>Proposed Development Gross Floor Area</td>
<td>Floor area calculated in accordance with Schedule 2.1 of the Capital City Plan, as applicable.</td>
</tr>
<tr>
<td>3.</td>
<td>Floor Area Up to (F AU) in square metres</td>
<td>Proposed Gross Floor Area (from Step 2) minus Base Gross Floor Area (from Step 1).</td>
</tr>
<tr>
<td>4.</td>
<td>Room area in square metres</td>
<td>Room area calculated with applicable Use of the floor area in square metres as desired from Table 1 and Fig.2.</td>
</tr>
<tr>
<td>5.</td>
<td>Value of floor area in square metres</td>
<td>10% of applicable UF (from Step 4).</td>
</tr>
<tr>
<td>6.</td>
<td>Total value of FAU</td>
<td>UFU (from Step 5) x value of each square metre of FAU (from Step 6).</td>
</tr>
<tr>
<td>7.</td>
<td>Total of Public Benefit to be provided</td>
<td>Equal to or greater than the total value of FAU (from Step 6).</td>
</tr>
<tr>
<td>8.</td>
<td>Agreed Public Benefit to be provided</td>
<td>Total value of each component as specified in Table 2.</td>
</tr>
</tbody>
</table>

Sources: Melbourne C270 How to calculate Floor Area Uplift and Public Benefit November 2016

**Limitations**

The FAU and public benefit policy in the central city has been in operation for a relatively short period of time. It is evident, however, that it is somewhat unlikely that proponents will provide affordable housing as a public benefit. The reasons for this are twofold. Firstly, the 18:1 FAR threshold before the FAU requirements take effect is a very high benchmark. A significant share of new developments will fail to exceed this density and therefore will not be required to make a public benefit contribution. Secondly, should a proposal exceed the 18:1 FAR limit, the proponent is likely to provide commercial floor space as a public benefit in preference to any other benefit categories listed. It would be illogical for a developer to provide affordable housing at zero consideration when there is an alternative, revenue
generating option available. This ‘loophole’ is likely to undermine the operation of the policy in terms of securing any other category of public benefits in the foreseeable future.

**Fishermans Bend**

New planning controls for Fishermans Bend – Amendment GCB1 – was gazetted in October 2018.

The Fishermans Bend Review Panel devoted significant time and effort to reconciling growth forecasts, density controls, planning for land use mix, public benefit (FAU) mechanisms and affordable housing requirements. The panel ultimately recommended that FARs be abandoned in favour of dwelling density controls.

An initial FAU mechanism was proposed with three categories of public benefit: affordable housing, additional open space and community infrastructure. The FAU policy is intended to create an incentive for the provision of affordable housing by allowing proponents to build eight additional private dwellings at a ‘price’ of one affordable housing dwelling built and transferred to an appropriate managing authority at no cost (Figure 7).

**FIGURE 7: INITIAL PUBLIC BENEFIT CATEGORIES AND RATIOS FOR FISHERMANS BEND**

<table>
<thead>
<tr>
<th>Public benefit category</th>
<th>Public benefit ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affordable housing</td>
<td>Eight additional dwellings to each affordable housing unit, providing the affordable housing unit mix replicates (size etc) the dwelling mix constructed and delivered for the market by the developer.</td>
</tr>
<tr>
<td>Additional public open space</td>
<td>One additional dwelling to the equivalent value of the additional public open space.</td>
</tr>
<tr>
<td></td>
<td>The value will be subject to the approval of the Valuer General and subject to approval by the Victorian Government Monitor.</td>
</tr>
<tr>
<td>Delivery of community infrastructure</td>
<td>One additional dwelling to the equivalent value of the community infrastructure.</td>
</tr>
<tr>
<td></td>
<td>The value will be subject to the approval of the Valuer General and subject to approval by the Victorian Government Land Monitor.</td>
</tr>
</tbody>
</table>

Source: DELWP (2017) “How to Calculate Floor Area Uplifts and Public Benefits in Fishermans Bend”

**Dwelling density control recommendations**

In place of FARs, the Review Panel recommended density be controlled via dwelling densities, expressed as dwellings per hectare (see second row of the table below).

These densities were derived from the Review Panel’s assessment of appropriate densities for each Precinct (discussed in Chapter 2.4 of their report). They estimated that the proposed densities would increase the lower range population estimate for Fishermans Bend by 2050 from 80,000 to 98,000. They went on to suggest that this leaves scope for the social housing uplift mechanism (see below) to operate within the difference between those population estimates, and the upper range population estimate of 120,000 people by 2050.

---

4 See Chapter 7 of the Review Panel’s report.
Floor area uplift policy for social housing (‘social housing uplift’)

The initial proposal for three categories of public benefits was narrowed to a single benefit category of social housing. The Review Panel favoured the narrow focus for the uplift mechanism as it was more likely to generate the desired and required social housing. Note that social housing is distinct from the broader definition of ‘affordable housing’ which is also used in the Fishermans Bend planning controls.

The policy is based on a public benefit ratio approach where the required public benefits contribution is calculated via a dwelling ratio. The ratio in this case is 8:1, meaning that for every 8 additional dwellings permitted as FAU, the proponent is required to provide 1 social housing dwelling.

Assuming that the intent of this policy is the capture 100% of the land value uplift from the FAU as a public benefit, the 8:1 ratio implies that the RLY for eight market dwellings in Fishermans Bend is equivalent to the total value of one affordable housing dwelling.

Although this approach differs from that in operation in central Melbourne, both approaches share the same basic land economics: the granting of an approval for additional floor space dwellings generates an increase in the RLY of the site, rather than flowing to the land seller, this uplift is captured for the broader benefit of the community.

Interestingly, the Review Panel’s report noted that the Panel did not believe that it was presented with sufficient evidence to justify the 8:1 ratio: “The Review Panel does not consider it appropriate to endorse the proposed 8:1 ratio on the evidence before it. However, it represents a starting point.”

3.2 DELWP Activity Centre Pilot Project

The Department of Environment, Land, Water and Planning (DELWP) issued a Key Findings Report on its Activity Centre Pilot Project in 2018.

Floor space ratios

The key findings report appears supportive of the use of FARs in activity centres. The report notes that FARs “could be used to guide preferred development” in activity centres, that their use is “well established in other jurisdictions and was pioneered by DELWP and the City of Melbourne for the central city” and that FAR controls “can be combined with height controls to provide flexibility for site design responses, while also articulating development limits.”

Public benefit requirements

The report also discusses the issue of public benefits where they are sought in connection with approvals that exceed preferred height limits. This relevant section of the report is reproduced verbatim below.

---

Public benefits are often sought by councils in exchange for developments that exceed preferred maximum heights. However, there is no clear model on how to apply this approach.

Preferred height provides an opportunity to deliver public benefits, however, this must be under strict articulated criteria. Value uplift should not be associated with 'excellence in design' or amenity considerations which must be delivered in all circumstances.

Requirements should be included in the controls that directly relate additional height to the provision of a specified benefit that supports the design ambitions of the overlay. By providing a direct link between height and an additional benefit, a flexible approach is still maintained, while providing clarity regarding outcomes sought.

A more complex model allows the delivery of public benefit in exchange for a floor area uplift greater than otherwise permissible. Melbourne C270 provides an example of this sort of mechanism in the context of the central city, using floor area ratios bonuses to given incentives to adding public benefits. If this approach is adopted, proposed public benefits need to be strategically justified.

More substantial strategic justification is required to establish an appropriate set of public benefits accompanied by a pertinent formula to define what represents a 'commensurate' benefit for each case. This approach has only been applied within the central city (as implemented through C270) and is perhaps only feasible in similarly intensive areas of change such as metropolitan activity centres, higher order major activity centres or urban renewal areas.

Key Findings

If any public benefits are proposed, they need to be matched to specific local needs identified in planning policy and consulted on during the strategic planning process.

The discussion above does not explicitly identify public benefit requirements as a type of value sharing policy, although this is at the very least implied by the use of the term 'value uplift' (second paragraph).

The advice suggests there are two possible approaches to linking public benefits and additional height: the first involving "controls that directly relate additional height (and/or density) to the provision of a specified benefit"; and the second being the approach used in Amendment C270 where the measurement of value uplift and the public benefit requirements are directly linked via pre-scheduled dollar values rates.

The suggestion that the Amendment C270 approach is a "more complex model" is debatable. While somewhat more sophisticated in design, it is arguably more straightforward to implement. It also has the advantage of clearly pre-signalling to the market the opportunity for, and cost implications of, the FAU policy.

The first approach, which favours a policy 'link' between additional height and public benefits, is arguably less transparent for all parties, and is likely to result in more protracted and combative planning assessment processes.
3.3 Summary

From the above examination we can glean which are relevant to the formulation of a FAU policy for MPAC.

What is the purpose of an FAU policy?

FAU policies provide a planning mechanism whereby developments that exceed nominated floor space threshold (FAR or dwelling density) are required to provide public benefits.

They are a form of value sharing policy, justified on the basis of government seeking licence fees for access to development rights, which are a form of quasi-monopoly market.

What is the justification for the density limits at which the FAU takes effect?

The Central City Built Form Synthesis Final Report points out that there are no set ways to determine the floor area ratios. The average 18:1 FAR adopted in Amendment C270 is based on built form testing in the Southbank and Hoddle Grid precincts, which is expected to appropriately fulfill the area’s design objectives.

In the case of Fishermans Bend, the FAR was calculated based on the target population in 2050, employment forecast, and total required floor space for dwellings. However, the Review Panel suggested that design to the fixed target was not appropriate. As a result, FARs were set aside in favour of density controls expressed as dwelling per hectare which were, in most precincts, revised upwards from the proposed FARs, to provide additional development capacity.

It might be argued that FARs for a particular area should be set at a level that would permit the realisation of sufficient floor space to meet demand. If this were the case, should developers eschew the FAU policy, there would still be sufficient development capacity.

How is the value uplift associated with the FAU calculated?

The FAU policy in central Melbourne relies on a pre-scheduled rate approach whereby the land value uplift associated with additional floor space for each precinct and land use are set out in a table for ease of calculation. In this case these values in this table are the GRV of the resulting floor space, and the contribution rate – which is equivalent to the RLV per square metre – is 10% of the GRV amount.

At Fishermans Bend a dwelling ratio approach has been adopted which effectively sidesteps direct reference to the land value uplift implications of the policy. The 8:1 gifting ratio suggests that the land value uplift associated with eight additional dwellings is equivalent to the value of one social housing dwelling. More simply put, 8:1 is the ratio of RLV to GRV.

In SGS’s view, the pre-scheduled rate approach is more transparent, has the benefit of being readily translated to either a cash or in-kind contribution, and facilitates contributions where the total value is less than one entire dwelling.

Some examples of value sharing policies that use pre-scheduled rates from Victoria, New South Wales and the ACT are described in Appendix 1.

Types of contributions and valuation approaches

Amendment C270 features a list of public benefits and guidance on how to calculate their monetary value. These include public open areas, public areas within buildings, affordable housing, design competitions and strategically justified uses including office uses.

At Fishermans Bend, social housing dwellings provided on site are the only valid form of contribution.
Parallel development contribution mechanisms
The area covered by Amendment C270 is subject to open space contribution requirements but there is no DCP in place.

Similarly, the proposed social housing uplift policy at Fishermans Bend would apply in parallel to open space contribution requirements and any DCP or ICP requirements (if they were to be introduced in future).

The parallel application of different forms of development contribution types in these precincts is consistent with the framework described at Section 2.1 above. It suggests that an FAU policy in MPAC can exist alongside other types of development contributions, e.g. open space requirements and ICP/DCP requirements.
4. AN FAU POLICY FOR MPAC

This chapter provides advice on a recommended approach to implementing an FAU policy for MPAC.

4.1 Overarching principles

The following principles should inform the development of a FAU policy for MPAC:

- An FAU policy would be a value sharing mechanism whereby the additional value created through certain planning decisions is shared with the broader community through public benefit contributions.
- The value of the public benefit contributions should reflect the value created by the planning decision. This amount is reflected in the (hypothetical) increase in residual land value (RLV) as a result of a planning approval for additional floor space.
- For reasons of transparency and administrative efficiency, the FAU policy should provide pre-scheduled contribution rates that set out the dollar value of the public benefit contribution per square metre of additional development.
- Where residual land values differ between land uses and precincts, such differences should be reflected in the pre-scheduled rates.
- The pre-scheduled rates should be reviewed on a regular basis to ensure they reflect current residual land values.
- The value sharing contributions can exist alongside other types of contributions (e.g. Development or Infrastructure Contributions Plans, open space contribution requirements, or impact mitigation requirements).
- Approval for FAU floor space should not result in any trade-off or loss of amenity compared to a proposal that complies with the FAR for that site. FAU should only be permitted where it can be demonstrated that the proposed development complies with all other planning and amenity standards, and does not generate any unacceptable negative externalities, despite exceeding the nominated FAR.

4.2 Application

FARs have been established for each site in MPAC based on rigorous built form testing, including a peer review process. Compliance with the FAR requirements and the other suite of built form controls (e.g. height, setback, building separation, and so on) should result in acceptable built form outcomes. This work is documented in the Moonee Ponds Activity Centre: Built Form report by Hodyl and Co (2019).

Notwithstanding the rigorous testing that has gone into determining these density limits, opportunities may exist in some new developments to accommodate additional floor space above the FARs. This additional floor space is referred to as FAU. Planning approvals for FAU are contingent on two conditions:

- The proposal satisfying all other applicable planning scheme requirements for MPAC.
- The proponent providing public benefits of a value that reflects the value of the development rights (that is, the RLV) associated with the additional floor space.
4.3 Operation

Where it can be demonstrated that a development can exceed the nominated FAR limit without any unacceptable impacts, the proponent can access these additional development rights if they provide a public benefit contribution.

The value of the public benefit contribution will be equal to the value of the development rights associated with the additional floor space. This is reflected in the residual value associated with the additional floor space. It is recommended that a pre-scheduled rates approach is used whereby the value of the public benefit contribution is set out in a table that shows the dollar value of the contribution per square metre of development.

The table below sets out the estimated average RLV per square metre of gross floor space for residential development in MPAC based on analysis of sales of development sites with planning permits provided by property valuation consultants m3property (see Appendix 2).

The table currently has a single average RLV that applies across the activity centre. At this point in time there is not sufficient evidence or analysis to justify the use of different rates for different precincts. Rates for other land uses and other precincts might be added to the table in future, if required.

<table>
<thead>
<tr>
<th>Land use</th>
<th>Precinct</th>
<th>Contribution rate per sqm gross floor area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>All</td>
<td>$1,200</td>
</tr>
</tbody>
</table>

Source: SGS and m3property, 2019.

These rates should be reviewed regularly by a suitably qualified and experience valuer. If, over time, land values between precincts in MPAC are divergent, differential valuations between precincts might be warranted. Similarly, should the FAU policy be extended to other centres, the appropriate contribution rate would be based on specific analysis of RLVs for that location.

4.4 Types of public benefits

The FAU policy in central Melbourne features a list of public benefit types, while the Fishermans Bend FAU policy provide just one option: to provide affordable housing dwellings on site.

The definition of affordable housing in the Act states that “affordable housing is housing, including social housing, that is appropriate for the housing needs of very low, low, and moderate-income households”.

Given the level of unmet need for affordable housing in Moonee Valley, it is Council’s preference that a FAU policy for MPAC require public benefits be provided as constructed affordable housing or a cash-in-lieu contribution that would be deployed for this purpose.

This approach will increase the likelihood of Council securing affordable housing in the area.

---

7 It is estimated that 2,534 households in Moonee Valley have an unmet need for some form of affordable housing. This figure accounts for 3.5% of all households. This total is comprised of 408 homeless households, 1,300 very low-income households, 501 low-income households and 188 moderate-income households. Assuming that homeless and very low-income households are likely to need social housing, the total unmet need for social housing is 1,708 households. (Data sourced from idomunity: https://housing.id.com.au/moonee-valley/affordability-and-availability)
Proponents could satisfy this obligation by:

- Building affordable housing dwellings with a market value equivalent to the public benefit contributions amount, and to transfer the title to a Registered Housing Agency (RHA), at zero consideration (i.e. provide social housing), or
- Providing the public benefit contributions as a cash contribution to Council/RHA to be used for the provision of social housing 'off-site'.

Council may wish to contemplate alternative contribution arrangements, provided they are of equivalent value to the required public benefit contributions. For example, the proponent might offer twice the number of dwellings to a RHA on the basis that the RHA provides payment of 50% of their value. Alternatively, contributions might be directed towards the provision of affordable housing that is not social housing, provided the value is equivalent to the required public benefit contribution amount, and Council is satisfied that the proposed tenure arrangements will be alleviating housing stress for eligible households (i.e. those identified the Act definition). The specific arrangements with regard to the types of affordable housing dwellings, their design, location and price (if any), would be negotiated and set out in a s173 agreement/condition on the planning permit.

4.5 Worked example

In this hypothetical example, a proposed residential development exceeds the sites FAR by 2,000 sqm. The public benefit contribution is $1.2M, to be provided as either cash or in affordable housing dwellings of equivalent market value, gifted to a RHA.

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Site area</td>
<td></td>
</tr>
<tr>
<td>2. Floor area ratio for site</td>
<td>4.1</td>
</tr>
<tr>
<td>3. Floor space permitted within proscribed FAR (1 x 2)</td>
<td>8,000 sqm</td>
</tr>
<tr>
<td>4. Maximum floor area uplift</td>
<td>0.5:1</td>
</tr>
<tr>
<td>5. Maximum floor area uplift floor space</td>
<td>1,000 sqm</td>
</tr>
<tr>
<td>6. Gross floor space in proposed development</td>
<td>9,000 sqm</td>
</tr>
<tr>
<td>7. Floor area uplift floor space (FAU) (6 – 3)</td>
<td>1,000 sqm</td>
</tr>
<tr>
<td>8. Public benefit contribution rate for MPAC</td>
<td>$1,200,000</td>
</tr>
<tr>
<td>9. Public benefit contribution required (7 x 8)</td>
<td>$1,200,000</td>
</tr>
</tbody>
</table>

Note: As per Essential & Planning, 2013.

4.6 Other matters

Impact on development feasibility

Provided the FAU policy and contribution rates are known in advance of investment decisions, the policy should not have any adverse impact on development feasibility. Developers and land owners will be aware that the land value uplift generated by the FAU floor space will be subject to the public benefit contribution mechanism and should factor these requirements into their feasibility analysis and subsequent investment decisions.

Should the policy apply to all developments?

In SGS's view, there is no reason why the policy should not apply to all developments in MPAC, regardless of their size. Cash contributions could be made where the proposed FAU is

---

*To be the market value at the time the approval was granted.*
modest and the required public benefit contribution less than the value of one whole dwelling.

FAU public contribution rates compared

The table below compares the contribution rates of existing FAU policies with the proposed MPAC policy.

<table>
<thead>
<tr>
<th>Location</th>
<th>RLV/sqm for residential floor space</th>
<th>Contribution rate per sqm of residential floor space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melbourne CBD (Eastern Core)</td>
<td>$9,000 x 10% = $900</td>
<td>$900</td>
</tr>
<tr>
<td>Fishermans Bend</td>
<td>Not specified</td>
<td>$1,125*</td>
</tr>
<tr>
<td>MPAC</td>
<td>$1,200</td>
<td>$1,200</td>
</tr>
</tbody>
</table>

* Estimate assuming (1) the 3:1 ‘gifting ratio’ that applies in Fishermans Bend FAU policy reflects the ratio of GRV to RLV, and (2) a RLV per sqm of $9,000.

4.7 Estimate of total potential contributions

The total amount of public benefit contribution received will depend on the share of new developments in the activity centre that utilise the FAU provisions.

The table below estimates the total affordable housing provisions assuming 0%, 25%, 50%, 75% or 100% of new developments utilise the FAU provisions.

The land area requirements have been estimated assuming that the Centre will accommodate an additional 2,381 dwellings by 2040 (the average of the low and high range estimates in the Local Plan), with an average FAR of 4:1, comprised of 3.5:1 residential and 0.5:1 non-residential floor space.

This analysis suggests that the total public benefit contributions could be between $0 and $35 million. If these funds were used to directly purchase dwellings for affordable housing, this sum might provide up to 70 dwellings, assuming the average purchase price of $500,000.

<table>
<thead>
<tr>
<th>Share of developments that utilised FAU</th>
<th>Total land required (sqm)</th>
<th>Area of sites that take up FAU (sqm)</th>
<th>FAU floor space (sqm)</th>
<th>Contribution rate per sqm of FAU floor space</th>
<th>Total contribution by 2040 (Millions)</th>
<th>Dwellings @ $500k per dwelling</th>
<th>Share of new dwellings that are affordable housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>66,200</td>
<td>-</td>
<td>-</td>
<td>$1,120</td>
<td>$2.3</td>
<td>-</td>
<td>0%</td>
</tr>
<tr>
<td>25%</td>
<td>63,000</td>
<td>15,975</td>
<td>53,988</td>
<td>$1,200</td>
<td>$2.7</td>
<td>41</td>
<td>15%</td>
</tr>
<tr>
<td>50%</td>
<td>61,800</td>
<td>30,900</td>
<td>30,900</td>
<td>$1,200</td>
<td>$3.5</td>
<td>37</td>
<td>25%</td>
</tr>
<tr>
<td>75%</td>
<td>59,800</td>
<td>44,850</td>
<td>22,350</td>
<td>$1,320</td>
<td>$3.4</td>
<td>34</td>
<td>20%</td>
</tr>
<tr>
<td>100%</td>
<td>58,000</td>
<td>58,000</td>
<td>20,000</td>
<td>$1,320</td>
<td>$4.4</td>
<td>70</td>
<td>3%</td>
</tr>
</tbody>
</table>

APPENDICES

Appendix 1: Examples of pre-scheduled rate for value sharing policies

**Victoria – Growth Area Infrastructure Charge**

Growth Area Infrastructure Contributions (GAICs) are charged to contribute to funding State infrastructure in the growth areas of Melbourne. The scheme is administered under Part 9B of the Planning and Environment Act 1987 and the Taxation Administration Act 1997. GAICs are triggered by transfers of title, subdivisions, building permits, and significant acquisitions within the prescribed growth areas, currently within the LGAs of Cardinia, Casey, Hume, Melton, Mitchell, Whittlesea and Wyndham.

The GAIC can be made as a cash payment or provided as works-in-kind. The charge is incurred per hectare and is dependent on (i) when the transaction which triggered the GAIC liability occurred; and (ii) when the land was brought into the Urban Growth Zone.

Funding from GAICs is held in two public funds: the Growth Areas Public Transport Fund (which is used for public transport infrastructure and related costs), and the Building New Communities Fund (which can be used for different types of infrastructure such as transport that is not part of major public transport projects).

**TABLE 6: GAIC RATES, 2018-19**

<table>
<thead>
<tr>
<th>Financial Year</th>
<th>Type A Land (per hectare) ($)</th>
<th>Type B-1 &amp; B-2 (per hectare) ($)</th>
<th>Type C Land (per hectare) ($)</th>
<th>Interest on deferred GAIC (%)</th>
<th>Deferring works (months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018-19</td>
<td>115,440</td>
<td>85,862</td>
<td>115,830</td>
<td>3.20%</td>
<td>12</td>
</tr>
</tbody>
</table>

NSW – Georges River Voluntary Planning Agreements Policy

Georges River Council’s Policy on Planning Agreements was adopted in 2016 and applies throughout the LGA. Under the Policy, value sharing principles are applied to both planning proposals and development applications which seek to exceed the existing development control standards.

Land values are calculated by pre-scheduled land value rates for identified precincts and on a site-by-site basis for those that lie outside of those precincts. The value of the uplift generated by a proposal is calculated using the residual land value (RLV) of the site with any proposed changes minus the RLV of the site under current conditions (see FIGURE 9). The share of this value that is captured for public benefit under the Policy is 50%.

The types of public benefits that may be provided under a VPA include infrastructure, public health facilities, public and open space improvements, and other benefits including cash contributions and land dedications.

FIGURE 9: CALCULATION OF VALUE SHARING, GEORGES RIVER VPA POLICY

\[ C = \frac{RLV(2) - RLV(1)}{2} \]

Where:

\[ \begin{align*}
C &= \text{Monetary contribution} \\
RLV(2) &= \text{Residual land value of a site following either an instrument change, plus associated or consequential changes to any Hurstville or Kogarah Development Control Plan(s), applying to the site, or the consent to development on the site allowing an exceedance of development standards or other planning controls, which in both cases allow intensified development.} \\
RLV(1) &= \text{Residual value of a site under the existing the LEP and Hurstville or Kogarah Development Control Plan provisions.}
\end{align*} \]

FIGURE 10: RESIDUAL LAND VALUE BY PRECINCT, GEORGES RIVER VPA POLICY

<table>
<thead>
<tr>
<th>Use</th>
<th>Hurstville Central</th>
<th>Hurstville West</th>
<th>Hurstville East</th>
<th>Hurstville South</th>
<th>Kogarah Central</th>
<th>Kogarah West</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>$5,000</td>
<td>$2,000</td>
<td>$2,000</td>
<td>$2,000</td>
<td>$3,900</td>
<td>$2,500</td>
</tr>
<tr>
<td>Commercial (office)</td>
<td>$1,750</td>
<td>$1,500</td>
<td>$1,500</td>
<td>$1,750</td>
<td>$2,000</td>
<td>$1,850</td>
</tr>
<tr>
<td>Residential</td>
<td>$2,750</td>
<td>$2,500</td>
<td>$2,500</td>
<td>$2,750</td>
<td>$3,000</td>
<td>$2,750</td>
</tr>
</tbody>
</table>

Source: Georges River Council, 2016.

FIGURE 11: HURSTVILLE PRECINCTS FROM GEORGES RIVER VPA POLICY

Source: Georges River Council, 2016.

FIGURE 12: KOGARAH PRECINCTS FROM GEORGES RIVER VPA POLICY

Source: Georges River Council, 2016.
ACT – Leave Variation Charge

The Lease Variation Charge (LVC), implemented since 2011, captures the value of uplift gained when there is a change in land use such as an increase in the allowable number of dwellings on a site. The LVC is a feature of the leasehold system of property ownership in the ACT.

There are two methods used for calculating the LVC under the Planning and Development Act 2007:

- **Codified regime** (s276E) – through a table of fees with charges levied per dwelling/unit or per square metre of additional GFA, based on the type of zoning, location, and whether the proposal includes the consolidation of leases or a variation to the number of dwellings/GFA permitted on a site.
- **Valuation regime** (s277) – through the formula shown below in FIGURE 18, based on the value after the variation (V1) and the value before the variation (V2), with 75% of the uplift in value being paid as the LVC charge.

**FIGURE 18: FORMULA FOR VALUATION METHOD OF CALCULATING LVC**

\[
\text{LVC} = \left( V_1 - V_2 \right) \times 75\%
\]

Variations under section 277 include those which are not covered by the codified regime, such as proposals to add or delete a use or a clause from a lease or change an easement. The values used to calculate the LVC under the valuation regime are prepared by an accredited valuer. The improvement on the land comprised in the lease is not taken into account, with the charge based on the added value attributed to the lease by the variation.

In July 2017 changes came into effect which increased the charges applicable under the codified regime, with the intention of improving the efficiency and transparency of the planning system, minimising delays in development approvals, and bringing more clarity to the application of LVC charges. The codified regime does not factor in the existing value of land or value uplift in its calculations. An extract of the codified regime is shown in Table 1 along with a map illustrating examples of different precincts under the LVC system.

---

12 ACT Renting and Subletting Act 2007
13 Planning and Development (Lease Variation Charges) Determination 2007 (No 1), Disallowable Instrument [2007/375], Explanatory Statement

Advice on ACT Floor Area Uplift policy
<table>
<thead>
<tr>
<th>SUBURB</th>
<th>2 Dwellings</th>
<th>3 Dwellings</th>
<th>4 Dwellings</th>
<th>5-10 Dwellings</th>
<th>11-20 Dwellings</th>
<th>21-40 Dwellings</th>
<th>41-100 Dwellings</th>
<th>&gt;101 Dwellings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ainslie</td>
<td>$110,000</td>
<td>$65,000</td>
<td>$60,000</td>
<td>$55,000</td>
<td>$50,000</td>
<td>$45,000</td>
<td>$40,000</td>
<td>$35,000</td>
</tr>
<tr>
<td>Amaroo</td>
<td>$45,000</td>
<td>$45,000</td>
<td>$45,000</td>
<td>$45,000</td>
<td>$45,000</td>
<td>$45,000</td>
<td>$45,000</td>
<td>$45,000</td>
</tr>
<tr>
<td>Aranda</td>
<td>$50,000</td>
<td>$50,000</td>
<td>$50,000</td>
<td>$50,000</td>
<td>$50,000</td>
<td>$50,000</td>
<td>$50,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>Banks</td>
<td>$45,000</td>
<td>$45,000</td>
<td>$45,000</td>
<td>$45,000</td>
<td>$45,000</td>
<td>$45,000</td>
<td>$45,000</td>
<td>$45,000</td>
</tr>
</tbody>
</table>

Source: Planning and Development (Lease Variation Charges) Determination 23/13. (Note 1).

Source: Planning and Development (Lease Variation Charges) Determination 23/13. (Note 1).
FIGURE 15: EXAMPLE OF CHARGE DETERMINATION PRECINCT IN ACT LVC SCHEME

Appendix 2: Site sales and residual land value estimates

The data in the following table has been derived from sales evidence of development sites with approved plans in MPAC. This evidence was collected by property valuation consultants, m3property.

Table 7: Development site sales and residual land value estimates

<table>
<thead>
<tr>
<th>Site</th>
<th>Date of sale</th>
<th>Sale price</th>
<th>Site area</th>
<th>Storeys</th>
<th>Net saleable floor space in approved plans (dwellings)</th>
<th>Gross floor space (estimate)</th>
<th>Residual land value (RLV) per sqm gross floor space</th>
</tr>
</thead>
<tbody>
<tr>
<td>579-593 Mount Alexander Road, Moonee Ponds</td>
<td>Jul-19</td>
<td>$7,300,000</td>
<td>2,608</td>
<td>6</td>
<td>5063 (57)</td>
<td>5,182</td>
<td>$1,062</td>
</tr>
<tr>
<td>34-44 Pullee Street, Moonee Ponds</td>
<td>Dec-18</td>
<td>$12,000,000</td>
<td>1,887</td>
<td>10</td>
<td>7507 (88)</td>
<td>9,025</td>
<td>$1,115</td>
</tr>
<tr>
<td>30-32 Holmes Road, Moonee Ponds</td>
<td>Oct-18</td>
<td>$8,400,000</td>
<td>1,076</td>
<td>4</td>
<td>2612 (33)</td>
<td>2,444</td>
<td>$1,267</td>
</tr>
<tr>
<td>11-13 Norwood Crescent, Moonee Ponds</td>
<td>Jun-17</td>
<td>$3,000,000</td>
<td>841</td>
<td>4</td>
<td>1869 (20)</td>
<td>2,393</td>
<td>$1,204</td>
</tr>
<tr>
<td>74 Pascoe Vale Road, Moonee Ponds</td>
<td>Oct-19</td>
<td>$2,050,000</td>
<td>625</td>
<td>4</td>
<td>1115 (14)</td>
<td>1,363</td>
<td>$1,379</td>
</tr>
<tr>
<td><strong>Average of five sites</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,226</td>
</tr>
<tr>
<td><strong>Rounded average</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,200</td>
</tr>
</tbody>
</table>

Source: m3property, 2019.
Moonee Valley Language Line

阿拉伯 Arabic 9280 0738  Ελληνικά Greek 9280 0741  Español Spanish 9280 0744
粵東話 Cantonese 9280 0739  Italiano Italian 9280 0742  Türkçe Turkish 9280 0745
Hrvatski Croatian 9280 0740  Somali Somali 9280 0743  Việt-ngo Vietnamese 9280 0746

All other languages 9280 0747
National Relay Service 13 36 77 or relaysexvice.com.au
This publication is available in alternative accessible formats on request.
MOONEE PONDS
ACTIVITY CENTRE
WIND
Wind Guidelines for Planning Applicants

The Wind Guidelines for Planning Applicants has been directly informed by the Wind Background Report

Contents

1. Introduction ........................................ 6
   1.1 Objectives ........................................ 6

2. Criteria for a good pedestrian wind environment ........................................ 7
   2.1 Safety criteria ........................................ 7
   2.2 Comfort criteria ........................................ 7
   2.3 Street level screening and vegetation ........................................ 7

3. Acceptable pedestrian wind environment assessments ......................... 8
   3.1 Wind Effects Statement ........................................ 8
   3.2 Scale model wind tunnel test ........................................ 10
   3.3 Required assessment area ........................................ 10
   3.4 Applications of comfort and safety criteria ........................................ 10
   3.5 Testing requirements ........................................ 11

4. Design guidance for wind ........................................ 13
1. Introduction

As the Moonee Ponds Activity Centre (MPAC) continues to transform and grow, it is essential new development complements and enhances the public realm. The built environment can significantly influence ground-level wind conditions, which in turn influence the pedestrian experience on the area.

When a building is considerably taller or otherwise more exposed than surrounding buildings, the pedestrian wind environment may be intensified. This can potentially affect pedestrian safety and comfort.

Once a new building is complete, it becomes very difficult to significantly change the resulting ground level wind conditions. Therefore, it is important to achieve good design outcomes for the pedestrian wind environment at the early planning stage.

1.1 Objectives

These guidelines are to assist planners and planning permit applicants understand:

- the standards of a good pedestrian wind environment
- the requirements of an acceptable Pedestrian Wind Environment Assessment.

Glossary

**Pedestrian wind environment**
The wind conditions in pedestrian level areas, typically ground level areas, considered in relation to criteria for human comfort and safety.

**Flow channelling**
Flows constrained to move between closely spaced structures and/or long continuous structures (e.g. street frontages) often resulting in elevated wind conditions.

**Downwash flows**
Flows moving relatively unimpeded above the surrounding terrain and deflected downwards towards ground level by an obstruction such as a large building facade.

**Turbulent wake flows**
The flow patterns typically occurring behind bluff objects in a flow (such as a building). These flows swirl randomly (turbulence) and have low mean flow speeds.

**Mean wind speed**
Wind speed averaged over 1 hour.

**Gust wind speed**
The maximum wind speed averaged over 3 seconds occurring in any 1 hour period.

**Wind hot spots**
A localised area experiencing significantly higher wind speeds than other nearby areas.
2. Criteria for a good pedestrian wind environment

A pedestrian wind environment assessment considers the proposed development’s impact upon two criteria: safety and comfort.

2.1 Safety criteria

Safety criteria are the limiting wind conditions above which pedestrians would tend to be knocked over.

Unsafe wind conditions mean an expected annual maximum gust wind speed exceeding 20 metres/second (m/s) with a probability of exceedance of 0.1% considering all wind directions.

2.2 Comfort criteria

Comfort criteria are the limiting wind conditions above which everyday activities (walking steadily along a footpath, reading a newspaper on a cafe terrace) become frequently too difficult for most people to engage in.

Comfortable wind conditions mean all wind directions combined with a probability of exceedance less than 20% of the time, equal to or less than a wind speed of:

- 3 m/s for sitting areas
- 4 m/s for standing areas
- 5 m/s for walking areas

Where the wind speed means the maximum of the:

- Hourly mean wind speed, or
- Gust equivalent mean speed (gust wind speed divided by 1.85)

2.3 Street level screening and vegetation

The installation of wind mitigating devices within the footpath width, for the purpose of resolving wind issues generated by a proposed development, is firmly discouraged.

Both the pedestrian safety and walking comfort criteria must be achieved in public areas without recourse to the shelter afforded by proposed vegetation. It is recommended that any reliance on screening for wind purposes (vegetation or otherwise) on public footpaths be a last resort solution.

There are too many services located underneath and above footpaths to adequately accommodate the large trees and screens required for wind mitigation. Planting is allowable to provide local shielding for more sedentary activities.

3. Acceptable pedestrian wind environment assessments

Pedestrian wind environment assessments should be conducted by suitably qualified consultants. There are two ways they can be undertaken:

- Wind Effects Statement
- Scale Model Wind Tunnel Test

A Scale Model Wind Tunnel Test is preferred over a Wind Effects Statement because Wind Effects Statements are based on professional opinion and judgement only and can be highly inaccurate.

3.1 Wind Effects Statement

A Wind Effects Statement must be to the satisfaction of the responsible authority.

A Wind Effects Statement is an opinion-based assessment and must include the following:

1) A diagram showing the assessment area, clearly marking all ground level areas to be assessed and the criteria applied to those areas. See an example schematic ground floor plan in Figure 2.

2) A statistical wind climate model using the Bureau of Meteorology’s Tullamarine Airport weather station mean wind speed data from 1978 to 2018.

3) An assessment of the site wind speeds, appropriate for comparison with the safety and comfort criteria, at pedestrian height and in accordance with the Australian/New Zealand Standard 1170.2:2011 Structural Design Actions, Part 2: Wind Actions (AS/NZS 1170.2:2011) Section 2.2 (i.e. including suitable terrain category, topographic and shielding effects), where Vw is derived from the results of the statistical wind climate model (2) and z = 2m for a minimum of 8 wind directions.

4) Identification based on professional judgement of likely wind “hot-spots” within the assessment area due to the proposed building geometry and/or wind exposure and/or intended use of those areas. Provide sample calculations of estimated speed-up effects (if any) over the site wind speeds due to the proposed development based on empirical aerodynamics data.

5) Discussion (based on professional judgement) of any significant aerodynamic interactions likely to occur with adjacent developments in terms of both shading and/or augmentation of wind flows in the identified wind hotspots.

6) Provide a conclusion based on the results of the assessment of the site wind speeds, likely wind hotspots, and likely significant aerodynamic interactions.

7) Clearly state whether or not a Scale Model Wind Tunnel Test is recommended, based on the consultant’s level confidence in the accuracy of the Wind Effects Statement.

For example, if the building is well-sheltered by adjacent developments from the stronger wind directions or has significant wind mitigation features then further testing may be deemed unnecessary. If the building is highly exposed or likely to experience significant and complex aerodynamic interactions with adjacent developments, which may vary greatly with wind direction, then the assessment should conclude that testing is required.

A Scale Model Wind Tunnel Test will be requested by Council’s reviewing wind engineer and/or Statutory Planners should they have significant concerns with the result of the Wind Effects Statement. This is to ensure the proposed development complies with the requirements of the pedestrian wind assessment.
3.2 Scale model wind tunnel test

A Scale Model Wind Tunnel Tests must be conducted in accordance with the Australasian Wind Engineering Society’s (AWES) Wind Engineering Studies of Buildings Quality Assurance Manual.

3.3 Required assessment area

Assessments for proposed developments must consider all public and private areas within.

R is defined as H/2 or B/2, whichever total is smaller, where H is building height and B is the largest plan dimension of the building (Figure 2).

3.4 Application of comfort and safety criteria

Areas where comfort criteria are to be applied should be clearly defined. For example, all main thoroughfares, footpaths and roadways (including pedestrian cross roads) should meet the criterion for walking comfort.

All areas and immediate surrounds (e.g. within 4 m) where people should feel comfortable while pausing, strolling or waiting for shorter periods (for example, retail frontages, bus and tram stops, main building entrances) should meet the criterion for standing.

Legend

- Existing development
- Proposed development
- Minimum area required for wind assessment
- Road network

H = Building height
B = Largest plan dimension of the building
R = H/2 or B/2 (whichever total is smaller)

Figure 1

Example schematic ground floor plan view of a proposed development and immediate surrounds showing a suggested application of the wind criteria to adjacent occupied areas. The proposed development must not generate wind conditions in excess of these criteria within the areas illustrated; no other areas must also meet the criteria for safety.

Figure 2

Wind assessment area
Similarly for seating and recreation areas, all such areas and immediate surrounds (e.g. within 4 m) where people might be encouraged to reconsult for longer periods (for example, café terraces and outdoor dining) should meet the criterion for sitting comfort.

It cannot be assumed that because a location meets one of the comfort criteria, that it must also by implication, meet the safety criterion. This is not the case and therefore all publicly accessible areas must be assessed against and be shown to meet the criterion for safety.

3.5 Testing requirements

Where a measurement location indicates an exceedance of the nominated comfort criterion and a local screening device (for example, canopy, wind-break screen, façade fin) is employed within a distance of two cross-wind-screen-widths of the measurement location, then the testing must add at least one measurement location a further two cross-wind-screen-widths locally downstream for that wind direction and retest all wind directions (see Figure 3 below).

Where a measurement location indicates a safety result of over 18 m/s, (approaching or exceeding the safety criterion) and a local screening device is employed, then the testing must add at least a further three measurement locations evenly spaced on a 5m full scale equivalent radius of the original measurement location. All wind directions must be retested to check the vicinity for exceedances (Figure 4).

The Scale Model Wind Tunnel Test statistical wind climate model will be based on the Bureau of Meteorology’s Tullamarine Airport weather station mean wind speed data from 1970 to 2018.

Figure 3

Ground level plan view of an example testing scenario showing additional measurement location requirements to establish flow field.

Figure 4

Ground level plan view of an example testing scenario showing additional measurement location requirements to establish flow field.
4. Design guidance for wind

The best approach to the problem of unpleasant pedestrian wind conditions lies in the placement and design of buildings. The development of buildings should consider the surrounding built form.

For example:
- tall buildings should not be built in isolation without a podium and significant tower setback;
- one building placed to windward of another can act as a wind shield, protecting the second building, or can augment the downwash between the buildings;
- a building placed across a ground-level thoroughfare from another building may result in strong flow channelling in the thoroughfare, and
- buildings on corner blocks are often highly exposed to wind and should be treated accordingly.

As well as considering wind interactions with the surrounding built form, individual buildings can be designed with inherent wind mitigating features such as:
- a tower block rising out of a podium,
- a building with substantial verandas around its just above pedestrian height,
- a building which has large vents through it in non-pedestrian areas to channel wind, and
- a building which is circular or octagonal in plan form shape encourages horizontal flow around the building thereby reducing the amount of downwash.

It should be noted that these design recommendations are strictly from a wind engineering perspective. The responsible authority should consider a comprehensive design response, balancing the needs of the site and its context.

Supporting Background Report - Wind
This report presents views on the safety and comfort of the pedestrian wind environment strictly from a wind engineering perspective.

Other specific urban design and built form measures have not been considered.

Unless otherwise stated, all images are owned by Council.
1. Executive summary

The objective of this report is to:
- provide an introduction to pedestrian-level wind effects,
- explain why this an important town planning consideration, and
- recommend planning controls to ensure appropriate pedestrian wind environment outcomes for pedestrian safety and comfort.

The report draws on reference material including existing best practice planning regulation for the pedestrian wind environment from around the world (such as the City of Mississauga's Pedestrian Wind Comfort and Safety Studies, June 2014) and the author's significant professional experience as a wind engineer.

The wind environment is, in general, a poorly understood and often neglected urban design consideration.

The built environment has a significant impact on the wind environment in adjacent ground level areas, especially when a building is considerably taller or otherwise more exposed than surrounding buildings. This is the case for the Moonee Ponds Activity Centre (MPAC) where medium and high-rise buildings are being developed in an otherwise traditional low-rise area. Buildings with exposure to wind, such as in MPAC, tend to intercept the stronger winds that exist above the surrounding terrain and redirect some of the wind downwards towards the ground level. Winds around the base of such buildings can be accelerated up to several times the values that existed prior to the taller buildings, thus creating uncomfortable and sometimes dangerous conditions for pedestrians. It should be noted that wind induced forces are proportional to the square of the wind speed; hence a doubling in wind speed induces four times the experienced wind force.

It is important to note that, once the built form is complete, it can be very difficult to significantly change the resulting ground level wind conditions. Simply adding footpath trees or screens is rarely enough to overcome major negative wind conditions. Therefore, it is important to achieve good design for the pedestrian wind environment at the early planning stage.

In order to ensure a good outcome for the pedestrian wind environment in MPAC, it is important to address wind in the planning process. This report makes the following recommendations for the Moonee Valley Planning Scheme, and this is in line with current best practice planning regulation for pedestrian wind effects from around the world.

Recommendations to the Planning Scheme should include:
- An acknowledgement of pedestrian wind effects as a design aspect to be considered
- A clearly stated trigger indicating in what scenario a wind assessment would be required
- Guidance on good design for wind
- Clearly stated, technically correct pedestrian wind effects criteria
- Direction on the application of the criteria
- Guidance on acceptable wind assessments
- Guidance on the use of vegetation and local screening to achieve acceptable wind conditions.

Detailed content for these recommendations and supporting documentation is discussed in the main body of the report.

2. Introduction

The pedestrian wind environment is an often neglected planning and urban design consideration, yet the wind environment has a marked effect on the popularity of an area and thus, its long term viability as a thriving centre. On a localised microclimate street-by-street level, the wind at ground level can be heavily influenced, both positively and negatively by the form of the built environment.

Isolated buildings with shear façades to ground level tend to result in adjacent ground level areas experiencing magnified wind conditions (Figure 1). The larger the façade, or the greater the exposure to prevailing winds due to the location or the relative difference in height with surrounding developments, the stronger the effect tends to be. For example, an exposed 36 storey building can result in an increase in ground level mean wind speeds over existing levels in the order of 50% (Wellington City Council WCC, 2030, p.7). It is important to note that wind force is proportional to the square of the wind speed, for example, a 50% increase in wind speed increases the perceived force of the wind by a factor of 2.25 (= 1.52). Another way of describing this is a 50% increase in wind speed increases human discomfort levels by 125%.

An example of an exposed tower creating significant increases in the pedestrian wind environment is Bridgewater Place in Leeds, United Kingdom (Figure 2). This exposed tower, with shear façades to ground level and a built form poorly orientated relative to the strong prevailing wind direction, caused ground level winds so severe that people have been injured on multiple occasions. In one instance, a truck was rolled by wind conditions caused by the tower killing one pedestrian and injuring another.
To improve the pedestrian wind environment at the base of Bridgewater Place, a significant project was undertaken to build a series of large wind deflector panels, retro-fitted around the tower’s base and spanning adjacent roads (Figure 2). In the interim period, the road was closed during strong wind events which caused significant disruption for the community.

The built form does not, by any means, always result in negative changes to wind conditions. Good design can mitigate the effects of exposed buildings and there are examples of built forms that have resulted in improved wind shelter. Courtyards, either fully or partly enclosed, such as the Moonee Ponds Central courtyard on Hall Street (Figure 3), are an example of a built form which provides an outdoor space sheltered from wind (WCC, 2000, p. 13).

Southbank Promenade at the Princes Bridge/Art Centre end (Figure 5) and Federation Square (Figure 4) are local examples of successful wind-sensitive medium and high-rise developments. Both these sites are located in a relatively strong wind climate, and are quite exposed to prevailing winds but ultimately are popular places for pedestrians. This can be attributed, in part, to the significant design input from wind engineers to ensure good wind shelter.

With its adjacent, exposed high-rise towers, Southbank Promenade towards the Art Centre/Princes Bridge end could have easily been a very windy location. However, a prominent wind engineer was consulted in the early design stages and their advice was followed quite closely. The advice included setting the towers well back from the promenade, having legacies adjacent to the promenade all low-rise and highly articulated (not continuous), placing large canopies over seating areas, and establishing dense tree planting. From a wind perspective, the results are excellent.

Further west along Southbank Promenade, much of the wind advice applied to the section closer to the Arts Centre was not incorporated and the results from a wind perspective are less satisfactory (Figure 6). Popularity and activation of the area is lower, quite possibly in part due to elevated wind conditions.

An average person may look at Melbourne and conclude that outdoor cafes, retail and recreation spaces work well in Melbourne’s climate. They might be tempted to conclude that any outdoor space not to any building in Melbourne could “work”. However, they may not realise that they are only observing the successful examples, and the unsuccessful localities, instead of being bustling, highly activated spaces, are now dying for less pedestrian-activated uses such as office space.

There are many examples of these outcomes and the author has professional experience of such outcomes at a waterfront development in Brisbane, as well as in the number of streets and laneways in Melbourne's Docklands area. In certain parts of the Docklands, designers had hoped to replicate at least some of the vibrant activation in Melbourne’s older laneways (such as Degraves Street). However, the wind exposure of the Docklands laneways is such that foot-traffic is reduced and people tend not to “stop-and-shop” (too uncomfortable), and retail tenancies that rely on ambiance (cafes, restaurants) have struggled greatly and moved on.

The important message from this experience is to never underestimate the potential negative impacts of the wind climate on a precinct, and to be aware that once construction of the built form is complete, the conditions of the pedestrian wind environment are virtually inviolable. Therefore, careful consideration of the built form in this regard is necessary to achieve lasting value of the precinct for the public. This also includes the current and future property owners within the precinct and its environs.
3. Pedestrian wind environment in MPAC

MPAC's urban fabric is currently predominantly low-rise. Some medium and high-rise developments have occurred and several of these generate adverse wind conditions. As high-rise developments progress, the potential for additional adverse wind effects increases.

The existing pedestrian wind environment for MPAC (as is the case for most of Moonee Valley) is fairly benign. MPAC is predominantly comprised of low-rise developments, all of similar scale and density. As a result, pedestrian-level winds in most locations have fairly low speeds as most locations are fully immersed in the turbulent wake flows from upstream buildings. Since most buildings are of a similar size, comparatively few are exposed to wind and so comparatively few generate adverse pedestrian level wind conditions as a result (Figure 7). This is in spite of the fact that Melbourne's wind climate (the wind speeds measured over many years in an exposed location such as at the various airports) is strong when compared with other Australian capital cities.

As medium and high-rise developments are added to a predominantly low-rise terrain, these new buildings tend to be more exposed to wind as a result of their relative height difference with the surrounds. This in turn tends to result in an elevated pedestrian wind environment (Figure 8). Some recently approved medium and high-rise developments in MPAC, including one 30-storey tower and several towers of the order of 15 storeys, will almost certainly demonstrate this effect.

It might be observed that a medium and high-rise built form works well in terms of the wind environment in many places, such as the Melbourne CBD. But there are marked differences between the Melbourne CBD and MPAC's traditionally low-rise typology. The difference is a typical high-rise development in the Melbourne CBD is surrounded by other similarly sized buildings and so is comparatively sheltered. This leads to relatively good pedestrian wind environment in most areas within the CBD (Figure 9).
4. Introduction to wind engineering

4.1 Basics of wind engineering

Buildings form obstacles to wind flows, causing a positive static air pressure region to be formed on the windward face. At the same time, negative air-pressure regions (which forms a suction) form at the sides and downstream end of the building. Air (and all fluids) moves from zones of higher pressure to zones of lower pressure. A localised increase in wind speed occurs where regions of significantly different pressure are in close unobstructed proximity and the wind flows from the more positive pressure region to the more negative.

Pedestrian-level winds result from the complex flow patterns around buildings, which are a function of the building’s shape and size, relationship with other buildings, orientation to the mean wind flow and turbulence in the wind. Different-shaped buildings generate different wind effects.

Watching water flowing in a stream is a good analogy to grasp fluid mechanics and the sub-disciplines of aerodynamics and wind engineering. Water flowing in wide, deeper areas of streams flows more slowly and smoothly; there are fewer eddies (swirling flow). This is similar in many ways to wind flow in open country terrain. Wind engineers call the flow well above open terrain the freestream.

Water near the stream bed in the wide, deep areas flows more slowly than water near the surface, due to friction. Fluid engineers call this the boundary layer effect. As you get closer to a solid surface exposed to flow (such as the ground or the stream bed) the mean flow speed gets lower and the turbulence increases.

When the water flows around a larger rock in the stream, some of the flow is accelerated around the sides of the rock. Some may go over the rock and some will be deflected downwards, to eventually go around the sides of the rock. This can make the flow regions beside a rock very fast. There are areas upstream and downstream of the rock where the water stagnates or swirls in circles. Similar flow structures occur when a building is placed in a wind flow (Figure 10).

To continue with the stream analogy, in a narrow gap between two or three larger rocks in a stream you might expect to see significantly increased water flow speeds. Sometimes referred to as the venturi effect or flow channeling, large buildings located close together can have a similar channeling effect on wind flows (Figure 11). In some notable cases, designers have attempted to use this effect to generate power from wind turbines, especially in the context of MPAC, the effect can also produce adverse pedestrian wind effects at ground level.

A number of larger rocks in a stream often leads to rapids or ‘white water’ where the water flow is more chaotic. This is similar in some ways to wind flow through a city centre where multiple large buildings behave like large rocks in a stream and divert the wind flow from its steady course causing it to “churn”, becoming chaotic and variable (Figure 12). In some areas the flow is slower than the freestream flow but in other areas it may be much faster. In fluid mechanics the chaotic or variable nature of the flow velocity is called turbulence. The study of turbulent wind-flow about buildings is called bluff-body aerodynamics.
As such, by throwing some big rocks into a smooth-flowing part of the stream in an ad-hoc way would considerably change the flows in that part of the stream. The flow beside and amongst the rocks could end up being quite violent.

By building a closely spaced group of larger buildings in a low-rise suburban area with no regard for wind flow, an analogous situation can be generated where the wind flow created by large buildings is frequently chaotic and violently so, creating unpleasant and even dangerous wind conditions for people.

In summary, while the regional macro wind climate is weather dependent and beyond human control, localised wind conditions adjacent to developments can be significantly influenced by planning and the design of each building.

4.2 Wind conditions for pedestrian comfort and safety

Wind engineers often separate wind conditions for human comfort and safety into two distinct considerations: the mechanical and the thermal effects of wind.

The mechanical effects of wind are the result of the forces generated by the wind, such as leaving a hat removed by the wind, umbrellas flailed inside out, newspaper ruffled, froths blown off your beer/coffee, tables and chairs overturned, and people knocked over. These effects are independent of other environmental variables such as ambient temperature, humidity, and solar radiation.

The thermal effect of wind is the wind-chill effect where the human body is cooled by movement of wind (American Society of Civil Engineers, 2003). In Melbourne's mild-temperate climate, people tend to spend the majority of the year trying to stay warm and, even when well-dressed for the conditions, winds tend to cool the human body (the wind-chill effect). Therefore, increases in pedestrian level wind conditions tend to reduce outdoor human comfort. Public open spaces, recreation and retail areas become less and less popular as annual average wind conditions increase.

Pedestrian wind effects criteria are usually divided into a criterion for safety and comfort. Safety criteria are the limiting wind conditions above which people would tend to be knocked over. Wind conditions for comfort are the limiting wind conditions above which the type of activity relevant to the location (for example, walking with steady steps on a footpath, or reading a newspaper on a café terrace) frequently becomes too difficult or uncomfortable for most people and they choose to avoid the area or not use it as intended.
5. A worldwide review of regulation of wind in planning schemes

In 2015-16, the author researched planning schemes from around the world for planning controls relating to wind (Fricke 2016).

Planning regulations from 121 cities in North America, South America, Europe, Asia, and Oceania were reviewed. The cities investigated were selected based on having three or more of the following attributes:

- being in higher latitudes where stronger winds are common
- having many medium and/or high-rise buildings
- being in coastal locations exposed to prevailing winds, and
- located in countries with an active wind engineering community.

The study revealed the following:

On reviewing the various planning regulations, it became clear that there was a very wide range of approaches to regulation of pedestrian wind effects.

Some planning regulations had a discussion of the importance of good design for wind; a clear trigger for a pedestrian wind effects assessment to be required of a proposed development; illustrated guidance on good design for pedestrian wind effects; criteria that must be met and how those criteria are to be applied. In more than one case, the planning authority had produced a comprehensive, dedicated document on design for pedestrian wind effects.

In many cases, the approach to regulating pedestrian wind effects is either non-existent or somewhat lacking in direction. For many cities, although it may be noted that pedestrian wind effects is a design consideration and an assessment could be required, there may be little or no further guidance or regulatory requirements about the outcome of such an assessment. Many regulatory documents therefore left the impression that a good outcome for pedestrian wind effects would be more likely due to good fortune than anything else.

Most planning authorities in Australia have little or no regulation covering pedestrian wind effects for consideration in planning applications for new developments. Among those that do have documented requirements, most fail to set the tone for the required wind outcome by providing little description of the benefits of good design for pedestrian wind effects, little or no practical guidance on good design, or fail to set criteria in a manner that a professional wind engineer would consider technically correct.

At least partly as a result of this lack of regulation, there have been a number of developments in Australian capital cities that have been granted planning approval but which have, it seems fair to say, broadly failed to meet the public expectations of wind conditions (refer to newspaper articles such as, “Can Docklands be put back together again?”, Ian Munn, The Age, 3 March 2012).

(Extract from Fricke, 2016)
6. Recommended controls for the Moonee Valley Planning Scheme

This report makes several recommendations for the type and form of regulation for the planning environment in the Moonee Valley Planning Scheme (Planning Scheme). These recommendations relate specifically to MPAC and have the potential to be included as part of Schedule 1 Clause 37.03 (Activity Centre Zone), as part of the comprehensive review of MPAC controls, but could also be applied across the municipality.

These recommendations are:

- An acknowledgement of pedestrian wind effects as an important design aspect that designers may be required to consider
- A clearly stated trigger indicating in what scenario a pedestrian wind effect assessment would be required
- Some guidance on good design for wind
- Clearly stated, technically correct pedestrian wind effects criteria
- Direction on the application of the criteria

Each of these five elements are discussed in more detail in Appendix 1.

6.2 Assessment triggers for wind

This report recommends that the Planning Scheme introduce a trigger for a pedestrian wind environment assessment for MPAC and follow further review, to the rest of the municipality.

Three potential trigger options are discussed:

1. A trigger based on the City of Melbourne’s recommended trigger but with the trigger height reduced from 49 m to 20 m for reasons which are elaborated on below
2. A trigger developed by the author using as many of the variables likely to result in adverse wind conditions as considered feasible
3. A trigger at the discretion of the planning authority/responsible authority.

A recommendation is made at the end of this section of the report for a trigger which is considered to combine some of the best points of the above three options.

**Trigger Option 1: Height**

One possible trigger is the height of the proposed development. In this case, for development proposals over a pre-determined height, a wind assessment must be provided.

Many planning schemes that do have regulation for pedestrian wind effects use some form of building height as a trigger (Frick, 2016). The basic premise is that a taller building is likely to be more exposed to wind and the greater that exposure, the more likely it is to generate adverse pedestrian level wind effects.

If a trigger of this form is used, it is recommended that it should follow the City of Melbourne's example (City of Melbourne, 2017, p.749) as much as possible but with suggested edits in line with City of Wellington's trigger (20 m height) which is considered better suited for MPAC's more low-rise existing built form. The following wording has been adapted from Clause 43.02 – Schedule 2 to the Design and Development Overlay of the Melbourne Planning Scheme:

A permit should not be granted for buildings and works that would cause unsafe wind conditions or cause exceeding of comfortable wind conditions.

Given the Hoddle Grid is so heavily developed, a 40 m height trigger is reasonable as many surrounding buildings are higher than this. However, for MPAC and Moonee Valley generally, a 20 m building would typically be significantly taller than the immediately adjacent developments, and should therefore trigger a wind assessment. As evidence in support of this assertion, note that a proposed 33m building in Airport West (33 Matthews Avenue) with a fairly good orientation for minimising pedestrian wind effects was modelled by the developer's wind consultant as exceeding the criterion for safety on an adjacent footpath. Therefore, a 40 m height trigger cannot be considered to adequately capture problematic developments in Moonee Valley.

**Trigger Option 2: Consultation**

While building height has some influence on pedestrian wind effects, it is definitely not the only variable which determines whether an adverse pedestrian wind environment is likely. The context of each building (height relative to surrounding buildings, orientation of major façades, corner or mid-block location) are equally as important as absolute height.

Height however, is a very simple trigger to interpret and apply. For this reason, if a height trigger were to be adopted, it is recommended it be set on the lower side. This is to avoid as much as possible adverse outcomes from 'not especially tall' but otherwise highly exposed developments, such as those on corner locations and facing strong prevailing wind directions.

**Trigger Option 3: Accounting for Variables**

The wind effects generated by a development are a function of five elements:

- the regional wind climate (common to all Melbourne locations),
- the intersected use of the areas affected by wind flows generated by the proposed development (positively or negatively),
- the exposure of the development to wind,
- the geometry and orientation of the proposed development, and
- the interaction of flows with adjacent developments.

The first two are common to all locations in Moonee Valley and do not need to form part of a trigger criterion. A trigger would ideally consist of a brief, easy-to-apply assessment of the proposed development’s exposure, geometry, orientation, and adjacent development. Normally, such an assessment is the domain of an experienced wind engineer.
A wind assessment should be conducted where a proposed development meets one or more of the following criteria.

If the proposed development:

1. Is 7m greater in average roof height above local ground level (approximately two storeys) or more than the buildings on immediately adjacent sites (for example, adjacent across a roadway) in any direction. Note that an undeveloped site (such as public open space) is considered a site with building height equaling 0m. Where an adjacent building is a tower on a podium arrangement, meeting the requirements of Criteria 5 below, the height comparison must be made with the adjacent podium height.

2. Has two or more separate but adjacent facades bordering ground level access ways (for example, a corner block with a north facade facing an east-west street and a west facade facing a north-south street)

3. Has a street wall setback corresponding to an immediately adjacent development in that same street wall to within 24m and therefore creating a continuous facade of greater than 30m horizontal width.

4. Has a minimum horizontal tower separation above street wall of less than one tower width with an adjacent tower in any direction whether part of the same development or not (refer to Figure 14). For example, if either w1 > w3 or w2 > w3.

5. The requirement in Criterion 1 can be waived if a tower-on-a-podium arrangement is used where:
   a. the tower is set back on all sides of the podium by at least w/2, where "w" is the greatest plan form dimension of the tower plan form as shown in Figure 15 and
   b. the podium does not trigger any of Criterion 1 through to Criterion 3.

Trigger Option 2 - Discussion

This is the most complex trigger of the three discussed in this report. The advantages of such a trigger is that it should, in theory, capture the more complex sites, and let more developments progress without wasting time and effort assessing non-wind problems.

It can be seen from the suggested trigger criteria that there is a close relationship between each development and its surrounding developments in triggering a wind effects assessment. This trigger would probably be best suited to a scenario where development sites come up for approval sporadically across a large area where the majority of the existing buildings are unlikely to change during the development process.

In the case where multiple sites in a smaller area have planning applications submitted (similar to MPAO) it may not be clear which are likely to proceed and which may not. As such it would difficult (maybe impossible) for any party to make a reasonable assessment of whether any given proposal triggers a requirement for a wind assessment or not. For this last reason, it is the author’s recommendation that the planning authority consider master planning the precinct with a precinct-level wind assessment.

Figure 16
Diagrammatic application of the criteria for Trigger Option 2 - Accounting for Variables.

- Proposed buildings A and H would both trigger a wind assessment due to trigger criterion 2
- Proposed buildings B, D and G do not trigger any of the criteria for a wind assessment.
- Proposed building C triggers only criterion 1 but this is waived on the basis of meeting criterion 5.
- Proposed buildings E and F trigger criteria 3 and 4.
6.3 Pedestrian wind effects criteria

This report recommends that the Moonee Valley Planning Scheme adopt a set of pedestrian wind environment safety and comfort criteria in the Planning Scheme. The City of Melbourne and City of Mississauga’s wind criteria are almost identical in numerical value and the City of Melbourne criteria has been recommended for use in the Moonee Valley Planning Scheme (City of Melbourne, 2017; City of Mississauga, 2014).

These definitions of safe wind conditions and comfortable wind conditions are valid for application to the City of Moonee Valley. These definitions are based on extensive research conducted by Global Wind Technology Services in their report Central City Bull Form Review Wind Assessments (Global Wind Technology Services (GWTS), 2016). The GWTS report has been extensively reviewed, has been out for community consultation and considered, challenged by other wind engineering firms and had Victorian Planning Authority (VPA) legal review. The quality and reliability of the GWTS report does not appear to be in question.

GWTS have indicated their recommended definitions of unsafe wind conditions and comfortable wind conditions are equally applicable to City of Moonee Valley. The City of Melbourne criteria recommended here are almost exactly the same as those required by City of Mississauga, the main differences being City of Mississauga’s walking comfort criteria, and safety criterion, are more relaxed than City of Melbourne.

Populations anywhere in the world tend to respond similarly to the forces of the wind in relation to human safety and no criteria developed for human safety by any researcher is climate-specific. The definition of unsafe wind conditions as defined in the Melbourne Planning Scheme and the GWTS report is considered applicable to any location in the City of Moonee Valley.

Comfortable wind conditions are, at least to some extent, climate-specific, since outdoor human comfort is a function of a number of environmental factors including:

- Wind speed
- Temperature
- Humidity
- Mean radiant temperature

Fortunately, City of Melbourne and City of Moonee Valley are geographically co-located being small and immediately adjacent to each other. Therefore, they share the same climate for all intents and purposes. In this case, the definition of comfortable wind conditions as defined in the Melbourne Planning Scheme (2017) and the GWTS report (2016) are equally applicable to City of Moonee Valley.

The City of Melbourne Planning Scheme provides no introduction or explanation of the planning scheme wind criteria. City of Mississauga’s wind criteria introduction is well worded and the following introduction to the recommended criteria has been lifted in its entirety from City of Mississauga (City of Mississauga, 2014).
Definitions

Safety criteria are the limiting wind conditions above which pedestrians would tend to be knocked over.

Unsafe wind conditions means an expected annual maximum gust wind speed exceeding 20 metres/second (m/s) with a probability of exceedance of 0.1% considering all wind directions.

Comfort criteria are the limiting wind conditions above which everyday activities (walking steadily along a footpath, or reading a newspaper on a cafe terrace) become frequently too difficult for most people to engage in.

Comfortable wind conditions means all wind directions combined with a probability of exceedance less than 20% of the time, equal to or less than a wind speed of:

- 3 m/s for sitting areas
- 4 m/s for standing areas
- 5 m/s for walking areas

Where the wind speed means the maximum of the:

- Hourly mean wind speed, or
- Gust equivalent mean speed (gust wind speed divided by 1.85)

References on street level screening and vegetation to achieve acceptable wind conditions

The use of public footpath areas as a space to add wind mitigating devices to resolve wind issues (generated by a proposed development) should be firmly discouraged.

In line with the Melbourne Planning Scheme (2017, p.755), it is recommended that the Planning Scheme specifically state that both the safety and walking criteria must be achieved in public areas without recourse to the shelter afforded by proposed vegetation. It is recommended that any reliance on screening for wind purposes (vegetation or other) on public footpaths be disallowed. There are far too many services under footpaths and above to make it feasible for the often quite large trees and screens proposed by proponents and their wind consultants. Planting is allowable to provide local shielding for more sedentary activities (standing and sitting criteria).

If a proposed development cannot meet the required criteria in adjacent public ground level areas it may be necessary to set back the façade(s) from the street and install wind mitigating treatments in the setback area or reduce the overall massing of the built form.

Vegetation should be modelled accurately in terms of likely height and canopy diameter of a mature tree of the type proposed. Wind assessments that model the proposed trees of substantially greater height than can reasonably be expected in that location (e.g. due to location of overhead powerlines) should be rejected. Note: the aerodynamic modelling of vegetation in the wind tunnel requires significantly more porosity than results from accurate geometric scaling.
6.4 Application of wind criteria

It is recommended that the Moonee Valley Planning Scheme adopt some clear directives on the application of the wind criteria and the scope of ground level areas that must be considered when assessing a proposed development. The recommended wind assessment scope is based on the Australasian Wind Engineering Society’s Guidelines for Pedestrian Wind Effects Criteria (2014).

Requirements

Assessments for proposed developments must consider all public and private areas within the minimum area required (R). R is defined as H/2 or B/2, whichever total is smaller, where H is building height and B is the largest plan dimension of the building (Figure 18).

To avoid measuring and presenting misleading results, the wind assessment must not:

- present wind conditions right inside a sheltered door alcove as being indicative of wind conditions in the general vicinity of the building main entrance, and
- apply and meet the safety criterion only to footpaths with the implication this means it is acceptable for pedestrian comfort.

The Planning Scheme should clearly indicate how the criteria are to be applied within the area around the building. It cannot be assumed that because a location meets one of the comfort criteria, that it must also, by implication, meet the safety criterion. This is not the case and therefore there must be a clear statement that all public accessible areas must be assessed against and be shown to meet the criteria for safety.

Areas where comfort criteria are to be applied should be clearly defined using schematics. For example, all main thoroughfares, both footpaths and roadways (pedestrians cross roads too), should meet the criteria for comfort for walking.

All areas and immediate surrounds (e.g. within 4m) where people might be encouraged to be comfortable while pausing, strolling, or waiting for shorter periods (retail frontage, bus and tram stops, main building entrances) should meet the criterion for standing. Similarly for seating and recreation areas, all such areas and immediate surrounds (e.g. within 4m) where people might be encouraged to recreate for longer periods (café terraces, outdoor dining, outdoor theatre) should meet the criterion for sitting comfort.

Based on the experience with recent development proposals, it is recommended that an overlay of required wind criteria for the entire MPAC area such that all public areas have a minimum acceptable wind criterion applied. As detailed designs of development are presented, further refinement of this map could be included in close proximity to the development to take into consideration proposed main building entrances, retail frontage, plazas etc. specific to that development.

6.5 Acceptable wind assessment

The Planning Scheme should specifically state that wind assessments must be conducted by suitably qualified consultants and in accordance with the Australasian Wind Engineering Society’s (AWECS) Quality Assurance Manual: Wind Engineering Studies of Buildings (2019).

Wind Effects Statement

A Wind Effects Statement must be to the satisfaction of the responsible authority. A Wind Effects Statement is an opinion-based assessment and must include the following:

1) A diagram showing the assessment area, clearly marking all ground level areas to be assessed and the criteria applied to those areas (Example see Figure 19).

2) A statistical wind climate model using the Bureau of Meteorology’s Tullamarine Airport weather station mean wind speed data from 1978 to 2018.

3) An assessment of the site wind speeds, appropriate for comparison with the safety and comfort criteria, at pedestrian height and in accordance with the Australian/New Zealand Standard H170.2:2011 Structural Design Actions, Part 2: Wind Actions (AS/NZS 1170.2:2011) Section 2.2 (i.e. including suitable terrain category, topographic and shielding effects), where VR is derived from the results of the statistical wind climate model (2) and z = 2m for a minimum of 8 wind directions.

4) Identification based on professional judgement of likely wind “hot-spots” within the assessment area due to the proposed building geometry and/or wind exposure and/or intended use of those areas. Provide sample calculations of estimated speed-up effects (if any) over the site wind speeds due to the proposed development based on empirical aerodynamics data.

5) Discussion (based on professional judgement) of any significant aerodynamic interactions likely to occur with adjacent developments in terms of both shielding and/or augmentation of wind flows in the identified wind hot-spots.

6) Provide a conclusion based on the results of the assessment of the site wind...
speeds, likely wind hot spots, and likely significant aerodynamic interactions.

7) Clearly state whether or not a Scale Model Wind Tunnel test is recommended, based on the consultant’s level confidence in the accuracy of the pedestrian wind environment assessment.

For example, if the building is well-sheltered by adjacent developments from the stronger wind directions or has a significant wind-mitigation features then further testing may be deemed unnecessary. If this building is highly exposed or likely to experience significant and complex aerodynamic interactions with adjacent developments which may vary annually with wind direction then the assessment should conclude that testing is required.

A Scale Model Wind Tunnel Test will be requested by Council’s reviewing wind engineer and/or Statistical Planners should they have significant concerns with the result of the Wind Effects Statement. This is to ensure the proposed developments comply with the requirements of the pedestrian wind assessment.

Figure 19
Example schematic ground floor (plan view) of a proposed development and immediate surrounds showing a suggested application of the wind criteria to adjacent occupied areas. The proposed development must be assessed and demonstrated not to generate wind conditions in excess of these criteria and the criteria for safety within the areas illustrated.

Figure 20
Ground level plan view of an example testing scenario showing additional measurement location requirements to establish flow field.

Figure 21
Ground level plan view of an example testing scenario showing additional measurement location requirements to establish flow field.
6.6 Guidance on good design for wind

It is considered that providing guidance on design for wind is fundamentally important in achieving a good outcome, as it should result in more positive and transparent conversations between developers, wind consultants, and planners. It elevates the importance and sets the tone and expectations around wind early on before the design is too advanced.

It is strongly recommended that Council include a document covering guidelines for good design for wind effects similar to City of Mississauga’s Pedestrian Wind Comfort and Safety Studies (2014), and Wellington City Council’s guidelines (2000). Emphasis on the importance of a proposed development in relation to the existing or proposed adjacent developments is very important from a wind point-of-view.

Design Guidance

The best approach to the problem of unpleasant pedestrian wind conditions lies in the placement and design of buildings. The development of buildings should have to consider the surrounding built form.

In particular:
- tall buildings should not be built in isolation without a podium and significant tower setback,
- one building placed to windward of another cannot act as a wind shield, protecting the second building, or can augment the downwash between the buildings,
- a building placed across a ground-level thoroughfare from another building may result in strong flow channelling in the thoroughfare, and
- buildings on corner blocks are often highly exposed to wind and should be treated accordingly (City of Mississauga, 2014).

As well as considering wind interactions with the surrounding the built form, individual buildings can be designed with inherent wind mitigating features such as:
- a tower block rising out of a podium,
- a building with substantial verandas around it just above pedestrian height,
- a building which has large vents through it in non-pedestrian areas to channel wind, and
- a building which is circular, or octagonal in planform shape encourages horizontal flow around the building thereby reduces the amount of downwash.

With such designs as these, it can’t be assumed that further wind analysis is unnecessary, since variations of building design or the immediate surrounding environment may combine to worsen wind conditions for certain wind directions.

It is very difficult to predict accurately the interaction between the complex and turbulent natural wind flow and a sharp-edged three-dimensional object like a building. The only currently available way to accurately predict a building’s wind environment is by way of a detailed wind tunnel study. Since these can be costly, the developer is often in a dilemma, undecided whether to:
- undertake a full wind tunnel test before preparing working drawings, and risk having the wind tunnel report invalidated by subsequent design changes.
- undertake the full wind tunnel test after the preparation of working drawings, and risk the report necessitating major changes to the working drawings.

Guidance at the initial design stage can avoid the need for time consuming and expensive major revisions. The following pages summarise the likely effects of isolated buildings of simple basic form on the ground-level wind environment in their vicinity.

The diagrams are theoretical case studies undertaken overseas, and are accurate only for isolated buildings. In complicated situations, such as central Wellington, it becomes much more difficult to predict the wind effects of a new building. This makes expert advice essential.
Examples of Design of Individual Buildings for Good Pedestrian Level Wind Environment

The following are examples of building forms with features that tend to reduce pedestrian level wind effects:

Figure 22
Tower-on-a-podium arrangement - downwash flows from tower are intercepted by podium roof(s) and dissipated. Note that the dimensions of the setbacks of the tower on the podium are crucial and for larger buildings should be determined by testing (City of Bristol, Urban Living SPD, 2019).

Figure 23
Tower with cut-out and canopy - downwash flows from tower are intercepted and redirected above ground level by podium. Note that the dimensions are crucial and for larger buildings should be determined by testing (City of Bristol, Urban Living SPD, 2019).

Example of Individual Building Design Features Problematic for Wind

The following are examples of building design features known to cause increased likelihood of adverse pedestrian wind environment for the intended purpose:

Figure 24
Discontinuous, low width facades - flow tends to be deflected around the tower with little downwash effect. Examples are circular or hexagonal planform towers or multi-faceted towers such as Eureka Tower (Luke c, 2008).

Figure 25
Wide, continuous, exposed facades readily contribute to adverse pedestrian level wind environments.

Figure 26
Narrow, discontinuous facades, and well-spaced towers set back on much wider podiums allow low wind flows to diffuse through the upper elevations of the podium and reduce deflection of wind flows to ground level thus contributing to good pedestrian level wind environments.

Table of Contents

1. Introduction
2. Pedestrian Level Wind Environment
3. Design Considerations
4. Conclusion

Preceding-level Design Considerations

On a precinct design level, it is essential that each building take into account the surrounding developments.

Wide, continuous facades whether a single development or multiple adjacent developments should be avoided as those tend to deflect large volumes of wind flows into adjacent streets.
6.7 Summary of recommendations

A summary of the recommendations of this report is provided below for easy reference. Note that for each recommendation, suggested content has been provided in detail in the relevant chapter within the report.

1. Acknowledgment of wind
Adopt a formal acknowledgment of the importance of good design for pedestrian wind environment.

2. Trigger for assessments
Set a clear, comprehensive trigger for requiring wind assessments by proponents. Potential wording has been suggested, however, this is subject to change based on the drafting rules for controls in the Planning Scheme.

3. Design guidance for wind
Provide guidance on good design for wind preferably including illustrations.

4. Assessment criteria
Adopt a set of pedestrian wind environment safety and comfort criteria in the Planning Scheme. They are as follows:

Unsafe wind conditions means an expected annual maximum wind speed exceeding 20 metres/second (m/s) with a probability of exceedance of 0.1% considering all wind directions.

Comfortable wind conditions means all mean wind directions combined with a probability of exceedance less than 20% of the time, equal to or less than a wind speed of:
- 3 m/s for sitting areas
- 4 m/s for standing areas
- 5 m/s for walking areas

Where the wind speed means the maximum of the:
- Hourly mean wind speed, or
- Gust equivalent mean speed (gust wind speed divided by 1.85)

5. Application of criteria
Adopt clear directives on the application of the wind criteria and the scope of ground level areas to be assessed.

6. Wind assessment requirements
Set clear requirements for wind assessment. Importantly, the requirements should state that wind assessments should be conducted by suitable qualified consultants in accordance with the AWES Wind Engineering Studies of Buildings Quality Assurance Manual (2019).

7. Direction on vegetation and local screening
Provide directives on the use of local screening and vegetation on public footpaths to meet the assessment criteria.

7. Conclusion

Planning schemes from around the world have been reviewed and best practice design guidance and planning regulation for wind have been identified, presented and referenced. A recent major report on pedestrian wind assessment, Central City Built Form Review: Wind Assessments, for the Victorian Planning Authority has been reviewed and referenced.

The author has drawn on these reviews and his own significant professional experience in this field to provide guidance and recommendations for the development of leading planning controls for pedestrian wind environments.
8. About the author

This report was prepared by Harry Frieke, Senior Sustainability Officer at Moonee Valley City Council.

Bachelor of Engineering (Aeronautical), Sydney University, 1994.

This report provides expert guidance on the importance of designing for the safety and comfort of the pedestrian wind environment, and for the preparation of pedestrian wind environment planning controls in the Moonee Ponds Activity Centre, with a view to applying similar considerations across Moonee Valley.

Harry has extensive experience and expertise in the disciplines of wind engineering, and in the modelling and assessment of pedestrian wind environments, particularly for proposed developments in urban settings. Harry has been an active member of the wind engineering industry since 1997.

He was employed from 1997 to 2002 as a research fellow at Monash University's boundary layer Wind Tunnel Laboratory conducting:

- commercial wind tunnel testing of proposed developments for pedestrian level wind effects, and
- structural wind loads and pollutant dispersion for Met Consultants.

From 2002 to 2009 he worked for Vipac Engineers and Scientists as a consulting engineer in their wind engineering department.

From 2010 to present he has worked on a project basis for two wind engineering consultancies, JDH Consulting and Global Wind Technology Services. He has also worked for Monash University’s Wind Tunnel Laboratory. He has consulted on a large number of commercial wind engineering projects over a wide range of wind-related topics.

Since 2010, Harry has reviewed wind engineering assessments as part of planning permit applications for Moonee Valley City Council's Statutory Planning department.

At the request of the Australasian Wind Engineering Society, the peak wind engineering industry body in the Oceania region, Harry was one of two representatives from Australia at the 2012 APEC Summit on wind engineering. He was elected to the Committee of the Australasian Wind Engineering Society (AWES) in 2013 and holds the role of Treasurer. He has published and presented a number of papers at AWES workshops, with the majority related to pedestrian wind environment assessment.

In 2014, he gave a guest lecture at Monash University on pedestrian wind environments for the Department of Mechanical Engineering. Harry has been an external peer-reviewer for a number of commercial wind assessments and has been engaged as an expert witness on three pedestrian wind-related cases, two of which were resolved in his clients' favour and one, which at that time of writing, is still unresolved.

Appendix 1

Acknowledgement of Wind

Of the 62 planning authorities whose regulations acknowledged pedestrian wind effects, in 15 cases this acknowledgement was a brief statement or statements to the effect that pedestrian wind effects should be considered in the course of good design.

At the other end of the spectrum, however, several offices dedicated multi-page documents solely on pedestrian wind effects. Possibly the best example of this is the Canadian City of Mississauga (2014) with their comprehensive Pedestrian Wind Comfort and Safety Studies document, which is part of their Urban Design Terms of Reference series. This clearly outlines the City's pedestrian wind safety and comfort criteria, triggers for wind assessments, design configurations to be encouraged or avoided, requirements for qualitative and quantitative testing, and mitigation strategies.

Guidance on Design for Wind

Of the 62 planning authorities whose regulations acknowledged pedestrian wind effects, 32 provided some level of guidance on good building design to minimise adverse wind effects at ground level. This guidance ranges from a brief mention of façade setbacks to providing detailed guidance on multiple aspects of design for wind. An example of the latter category is the highly detailed Design Guide for Wind, City of Wellington (current), which provides illustrations of the effects of different wind flows and how they apply to a variety of buildings and outdoor areas. It also provides some limited guidance for mitigation.

Assessment Trigger for Wind

Of the 62 planning authorities whose regulations acknowledged pedestrian wind effects, 36 had stated triggers for wind assessments. The triggers varied widely, with very different degrees of specificity.

At the less-specific end of the spectrum, the City of Cape Town (2012) requires a pedestrian wind assessment of "tall buildings" where the height is left undefined. Similarly imprecise is the statement from the City of Cambridge.
(2008) for a pedestrian wind assessment for “any structure that breaks the skyline.”

The difficulty this lack of clarity poses to city councils is that it leaves a great deal open to interpretation, which may result in inconsistencies in application of the regulations to new developments.

Less ambiguous is the City of Montréal (undated) requirement for testing of buildings of “...heights half again as high as surrounding building heights in a 50 m radius...”.

Importantly this trigger clearly recognises that pedestrian wind effects are less a function of absolute height of a building and more a function of relative height to the surrounding buildings.

Several planning regulations do provide a clear and unambiguous trigger for pedestrian wind assessments. City of Winnipeg (2004) stipulates that “…new buildings or additions that exceed 15 storeys in height or the height of buildings on adjacent properties by 10 storeys or more…” require a pedestrian wind effects assessment. City of Hamilton (2012) requires a pedestrian wind assessment for “all buildings over 12 metres”.

Wind Criteria

Only eleven of the sixty-five planning authorities whose regulations acknowledged the need to consider pedestrian wind effects nominated a specific set of criteria against which any wind assessment must be made. Since criteria vary widely, this leaves the door wide open to interpretation of the acceptability of the wind speeds predicted by an assessment.

Of the planning regulations reviewed, those that best addressed pedestrian wind criteria, such as City of Melbourne (2015) and City of Mississauga (2014), presented clearly stated criteria and included all the necessary components to define the required wind measurement to a given safety or comfort level, i.e. wind speed, wind speed averaging period, and limiting probability of exceedance.

For example, the criteria required by City of Melbourne (2015) are clearly stated (a slightly modified version of Professor Bill Melbourne’s 1978 criteria) and are technically correct in that they state a limit wind speed, an averaging period for that wind speed and a limiting probability of exceedance.

In a number of cases, whilst criteria are stated, they are not stated correctly in that they do not state a probability level, or a wind speed averaging period. City of Wellington (2012), and City of Sydney (2012) are both examples of planning documentation with criteria stated, but without probability levels, or wind speed averaging periods.

Application of Wind Criteria

Of the planning regulations that do have criteria for pedestrian wind effects, some provide relatively clear directions on the application of those criteria. Typically this is restricted to which criteria are applicable to which type of area, e.g. City of Ottawa (undated) indicates the “Standing” wind category should be applied to “Major building entrances and bus stops”.

None of the planning regulation documentation reviewed included directives as to how far away from a proposed development wind conditions should be assessed and none appeared to have directions for the application of criteria for adjacent private properties. Of the documentation reviewed, only Australasian Wind Engineering Society (2014) provides any guidance in these areas.

References


Waste Management Plans – Guidelines for Planning Applicants
Waste Management Plans must be submitted to and approved by Moonee Valley City Council as part of the planning permit process. Commercial and mixed-use developments and residential applications with more than six individual properties must complete a Waste Management Plan.

All Waste Management Plans are to be written by a suitability qualified professional.

Revised December 2019
Contents

Scope ............................................................................................................................................. 2
Objective ......................................................................................................................................... 2
Waste Services in Moonee Valley City Council ........................................................................... 2
Developments in Activity Centres .............................................................................................. 3
Waste Management Plans minimum requirements applicable to all new planning applications for multi-unit developments .................................................................................................................. 3
Waste Generation Rates .............................................................................................................. 4
Multi-unit Developments and Minimum Truck Movements .................................................... 6
Multi-unit Developments and Basement Collections ............................................................... 8
Preferred Design Outcomes ........................................................................................................ 9
Waste compactors ....................................................................................................................... 9
Individual Dwelling Residential Bins and Collections Provided by Council ......................... 11
Council collections for multi-unit developments ...................................................................... 13
Entering private property ............................................................................................................. 13
Waste collection contractors ................................................................................................... 14
Waste collection from laneways ................................................................................................ 14
Signage ........................................................................................................................................ 14
Hard waste .................................................................................................................................. 15
Organic waste .............................................................................................................................. 15
Charity goods ............................................................................................................................... 16
E-waste ......................................................................................................................................... 16
Quality and Scope of Waste Management Plans ...................................................................... 17
Reference documents .................................................................................................................. 17
Scope

Council encourages best practice waste management systems and supports innovations in the design of waste management systems in multi-unit developments to ensure impacts on residential amenity, pedestrian traffic and public health are minimised.

These guidelines are to help developers, planners, architects, builders and planning permit applicants choose, design and implement best practice waste management systems in new developments.

Objective

- To ensure waste systems are implemented today to achieve positive outcomes for the municipality in the future.
- Council aims to ensure amenity, traffic, pedestrian safety and health are not adversely affected by operations servicing waste management systems in new and existing developments.

Waste Services in Moonee Valley City Council

Council has the discretion to require a new or existing development either to procure a private waste collection or use a Council collection.

Any new development requesting a Council collection must discuss its proposed waste management systems with Council officers prior to permit planning conditions being established. This requirement is to ensure best practice systems are in place, and Council has the capacity to service the development.

The owner or occupier of any land from which waste is collected by Council (or its contractor), must comply with the following:

- Section 4.25 of Council’s Activities & General Amenities Local Law 2018
- Council’s Waste Collection Guidelines
- VicRoads’ Code of Practice for the Placement of Waste Bins on Roadsides.

Use of space within a development

A development’s initial planning permit may not reflect future purposes. As such, any permit applications requiring a ‘change of use’ may require additional or reduced floor space to accommodate waste management systems.
Developments in Activity Centres

Moonee Valley City Council supports reducing waste truck movements in the municipality, particularly in Activity Centres. The Activity Centres in Moonee Valley are:
- Moonee Ponds Activity Centre
- Airport West Activity Centre
- North Essendon Activity Centre
- Niddrie/Kellor Road Activity Centre
- Union Road Activity Centre
- Racecourse Road Activity Centre

Waste Management Plans
minimum requirements applicable to all new planning applications for multi-unit developments

Your Waste Management Plan must include the following:
1. number of floors in proposed development
2. number of residential dwellings by number of bedrooms (studio, one, two and three or more bedrooms)
3. number of non-residential premises, floor area dimensions and type of premises
4. number of commercial premises with floor area dimension and type of commercial premises (eg. food, retail)
5. Estimate quantities of waste and recycling for all use types – these must be estimated by using Moonee Valley City Council’s generation estimates (see Table 1 & 2 of these Guidelines)
6. Chutes, carousels, drop-off areas and compaction facilities
7. Bin rooms: size m² layout and access
8. Bin types, quantity, size and colour
9. Collection frequency
10. Collection location
11. Waste service providers, either Council or private collectors
12. Scaled waste management drawings including all details of:
   a. bin storage rooms, including dimensions and access
   b. pedestrian access
   c. collection vehicle type including dimensions and access
   d. entry and exits including dimensions for waste collection vehicles
   e. swept path diagrams including dimensions.

Council retains the right to add requirements to the design of waste management systems depending on density and waste generations of the development.

Additional requirements may include: waste chutes for developments of four or more floors; and waste compaction units for developments generating more than 25,000L (litres) of both waste and recycling per week.

Developments that change proposed use of spaces resulting in more waste generation (e.g. proposed retail space changes use from non-food retail to a restaurant), will attract increased requirements.
Waste Generation Rates

Waste generation estimates by type of use for each aspect of the development should be aggregated. Where properties include a mix of residential and commercial premises, separate storage and collection of waste is required.

Please note: due to inconsistencies in waste estimation between Councils and government agencies, only Moonee Valley City Council waste estimation will be accepted (see Tables 1 & 2 below).

Table 1: Residential waste generation rates

<table>
<thead>
<tr>
<th>Dwelling type</th>
<th>Landfill Waste (weekly)</th>
<th>Recycling (weekly)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3+ bed apartment</td>
<td>120L</td>
<td>120L</td>
</tr>
<tr>
<td>2 bed apartment</td>
<td>100L</td>
<td>100L</td>
</tr>
<tr>
<td>1 bed/studio apartment</td>
<td>80L</td>
<td>80L</td>
</tr>
</tbody>
</table>

Table 2: Commercial waste generation rates

<table>
<thead>
<tr>
<th>Premises type</th>
<th>Landfill Waste</th>
<th>Recycling</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Retail premises (non-food) per 100 m² floor area/day</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail (non-food)</td>
<td>150L *</td>
<td>150L*</td>
</tr>
<tr>
<td>Shop</td>
<td>50L</td>
<td>50L</td>
</tr>
<tr>
<td>Convenience store</td>
<td>300L</td>
<td>160L</td>
</tr>
<tr>
<td><strong>Retail premise (food) per 100 m² floor area/day</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restaurant</td>
<td>660L</td>
<td>200L</td>
</tr>
<tr>
<td>Supermarket</td>
<td>660L</td>
<td>240L</td>
</tr>
<tr>
<td>Cafe</td>
<td>300L</td>
<td>200L</td>
</tr>
<tr>
<td>Take-away</td>
<td>150L</td>
<td>150L</td>
</tr>
<tr>
<td>Licensed club</td>
<td>50L</td>
<td>50L</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office/medical centre (per day)</td>
<td>10L</td>
<td>10L</td>
</tr>
<tr>
<td>Place of assembly (per day)</td>
<td>50L</td>
<td>10L</td>
</tr>
<tr>
<td>Child care centre/kindergarten (per week)</td>
<td>350L</td>
<td>350L</td>
</tr>
<tr>
<td>Education centre/student (per week)</td>
<td>1.5L</td>
<td>1.5L</td>
</tr>
<tr>
<td>Serviced apartments/apartment (per week)</td>
<td>35L</td>
<td>35L</td>
</tr>
<tr>
<td>Retirement village/dwelling (per week)</td>
<td>60L</td>
<td>60L</td>
</tr>
<tr>
<td>Boarding house/dwelling (per week)</td>
<td>60L</td>
<td>60L</td>
</tr>
</tbody>
</table>
Multi-unit Developments and Minimum Truck Movements

All waste and recycling bins must be stored within the property boundary. It is illegal for bins to be stored in streets, laneways, parks or other public spaces.

When a new multi-unit development is proposed, and estimations of both waste and recycling are in excess to 15,000L in total per week (as defined by Tables 1 and 2 above), the number of truck movements, as well as the time and day of collections will be restricted. These new developments must comply with Preferred Design Options detailed on page 9.

New developments required to use a private waste collection need to have the appropriate waste management systems in place to allow compliance with the following collection frequencies for each waste stream.

New developments should be designed to accommodate collections from truck sizes with sufficient capacity to meet the restrictions in number of truck movements. Table 3 details the restrictions which apply with only one vehicle per collection.

In the first instance, Council encourages on-site loading and waste collection. However, on-street loading opportunities will be considered on constrained sites. Common constraints (present in areas such as the Moonee Ponds Activity Centre) include the layout and connectivity of laneways not supporting truck access and smaller sites being incapable of accommodating a truck entering and exiting the site in a forwards direction.
Table 3: Maximum collections weekly (collection = 1 truck movement)

<table>
<thead>
<tr>
<th>Premises type</th>
<th>Landfill Waste (weekly)</th>
<th>Recycling (weekly)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 55 apartments</td>
<td>1 collection</td>
<td>1 collection</td>
</tr>
<tr>
<td>Residential/other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>56-150 apartments or up to 25,000L of total waste and recycling per week</td>
<td>2 collections</td>
<td>2 collections</td>
</tr>
<tr>
<td>151-400 apartments or up to 40,000L of total waste and recycling per week</td>
<td>3 collections</td>
<td>3 collections</td>
</tr>
<tr>
<td>&gt;400 or more that 40,000L of total waste and recycling apartments</td>
<td>compactor(s) emptied once or twice a week 200L</td>
<td></td>
</tr>
</tbody>
</table>

NB: High rise, high density multi-unit developments are considered on a case-by-case basis and additional collections may be appropriate in certain circumstances. Council retains the discretion to change collection frequency based on the individual development and waste/recycling generation estimations.

Proposed collections from areas or developments where there is high pedestrian foot traffic will be given strict time limits for collections based on the proposed collection and the size and usage of the pedestrian area.
Multi-unit Developments and Basement Collections

In developments where a collection from a basement is proposed, the following requirements (where relevant) should be addressed:

- if located in Activity Centres, the basement is designed to accommodate waste systems that allow waste collection to be compliant with that outlined in Table 3 above
- ramps leading into the basement have a maximum grade of 1:6.5, with a change no greater than 1:12 in 4 metres as outlined in Australian Standard AS 2890.2:200. In some cases, such as for small scale development within Moonee Ponds Activity Centre, Council retains the discretion to provide site specific responses which includes encouraging smaller trucks that are more likely to accommodate on-site and within laneways. This includes recognising that in certain applications, using steeper grades may be an appropriate response.

- mixed use developments estimated to create more than 25,000L of waste and recycling in total (refer Tables 1 & 2 above) will be required to meet clearance height requirements (3.5 metres) outlined in Australian Standard 2890.2:2002 Parking facilities – Off street commercial vehicle facilities
- the basement’s upper floor ceiling is sufficient to allow for a collection vehicle travel height, and the safe operational clearance heights for the lift and/ or transport of bins, consistent with the type of collection vehicle employed
- collection vehicles have clear space to make a three point turn clear of any structural obstructions and vehicle parking spaces
- the basement floor is industrial strength and can accommodate vehicles to a maximum of 7 tonnes per axle.
**Preferred Design Outcomes**

**Waste chute requirements for multi-level developments**

Developments more than four floors must have collection infrastructure such as a chute or an equivalent system on each floor for both landfill and recycling.

High-rise, high-density developments (greater than 10 floors) must use twin chute technology, with sufficient openings to meet the needs of the number of apartments on each floor for chute disposal of both landfill and recyclable waste. Where chute systems are installed, collection bins or carts are to have reinforced bases for improved longevity and rubber mats to reduce noise.

**Waste compactors**

Large developments with more than 400 residences or a total stream volume of 40,000L total of waste and recycling are required to use compaction technology to increase waste storage capacity.

Smaller developments may consider the use of smaller compactors, as appropriate.

Larger hook-lift static compactor units should be designed to hold at least one week’s residential and commercial/retail waste for the individual development. Council recommends compaction rates of 3:1 for both waste and recycling compactors.

Compactors have specific vehicular access requirements. For example, hook lift trucks require a 5 metre height clearance at the point of lift and 4 metre during path of travel. It is the sole responsibility of the developer to confirm vehicular access requirements with the compactor manufacturer and design waste systems accordingly.

For developments with volumes of waste above 25,000L, the following table should be used to determine the size of a static compactor.
Table 4: Compactor Size required by Waste Volume

<table>
<thead>
<tr>
<th>Waste Volume (L/week)</th>
<th>Compactor size (m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25,000</td>
<td>8</td>
</tr>
<tr>
<td>30,000</td>
<td>10</td>
</tr>
<tr>
<td>40,000</td>
<td>13</td>
</tr>
<tr>
<td>45,000</td>
<td>15</td>
</tr>
<tr>
<td>57,000</td>
<td>19</td>
</tr>
<tr>
<td>69,000</td>
<td>23</td>
</tr>
</tbody>
</table>

Compactors are the responsibility of the developer/owner/body corporate. Separate compactors must be used for landfill waste and recyclable materials. A compactor’s size is to be compatible with the collection vehicle.

**Glass crushers**

Glass crushers can reduce glass waste up to 75%, saving valuable space in bins. It is the responsibility of the developer to determine the suitability of a glass crusher for the development. Specialised bins and collection contracts may be required.

**Balers**

Large developments with commercial tenants or with more than 400 residences are required to use a cardboard baler to compress materials so as not to occupy valuable bin capacity. It is the responsibility of the developer of the dwelling to determine the size, suitability and collection method of balers.

**Bin quantity, size and colour**

Developers should be aware that bin size and quantities will impact collection vehicle access requirements. Plans should provide details of the number of bins and their size.

Council may, at its discretion, provide a multi-unit development with a larger bin or bins. Size and quantities of bins would depend on the size of the development and the estimated waste and recycling volumes.
Individual Dwelling Residential Bins and Collections Provided by Council

Council provides a weekly collection of 120L red lidded landfill bins and a fortnightly alternating collection of a green lidded garden and food waste bin and a yellow lidded recycling bin.

Table 5: Residential Bin Dimensions

<table>
<thead>
<tr>
<th>Size (L)</th>
<th>Width (m)</th>
<th>Depth (m)</th>
<th>Height (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>120</td>
<td>0.5</td>
<td>0.6</td>
<td>1.0</td>
</tr>
<tr>
<td>240</td>
<td>0.6</td>
<td>0.8</td>
<td>1.1</td>
</tr>
<tr>
<td>360</td>
<td>1.7</td>
<td>0.85</td>
<td>1.1</td>
</tr>
<tr>
<td>660</td>
<td>1.4</td>
<td>0.7</td>
<td>1.2</td>
</tr>
<tr>
<td>1000</td>
<td>1.4</td>
<td>1.3</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Please note: Council requires 300mm between each bin placed on the kerb to ensure appropriate space for collection. For example, one ‘set’ of a 120 litre waste bin and a 240 litre recycling bin would require 1.4 metres of property frontage. Additional ‘sets’ of bins would also require an additional 300mm between ‘sets’.

Bins should never be placed:
- near an intersection or roundabout
- in a laneway
- in a location restricting pedestrian access
- in a location obstructing a footpath
- in a location obstructing street furniture
- within a metre either side of a tree, street sign or other obstruction

Bin collection times should comply with EPA noise control guidelines for domestic refuse collections, which states the hours of bin collection must be between:
- 6am to 6pm Monday to Saturday, for collections occurring once a week.
- 7am to 6pm Monday to Saturday, for collections occurring more than once a week.

Where Council find a development’s waste and recycling collection may cause a disruption to traffic or pedestrians, a permit condition outlining a collection time outside the EPA guidelines may be applied.
Council collections for multi-unit developments

Council’s standard kerbside collection service is typically for single dwellings and smaller multi-unit developments, rather than larger multi-unit developments. Council, at its discretion, may provide a residential collection to a multi-unit development depending on the development’s suitability and Council’s capacity to adequately service the development.

Those proposing multi-unit development are strongly encouraged to seek advice from Council before embarking on the preparation of a Waste Management Plan.

Entering private property

Where neither a loading bay nor suitable kerbside collection area exists, Council or its nominated contractor may enter into an agreement with a body corporate or property manager to enter private property or private roads to collect waste and recycling under the following conditions:

- A Waste Management Plan has been completed and approved showing the proposed storage and collection location for waste/recycling receptacles
- Roads and driveways are the appropriate width and height to accommodate the collection vehicle
- Safe entry and exit, including any turning area is available (details must be shown in a swept path diagram attached to the Waste Management Plan)
- A risk management plan has accompanied the Waste Management Plan
- Current public liability insurance certificates have been supplied to Council by the body corporate or property manager
- Access to and from residential carparks has not been blocked by waste trucks.
Waste collection contractors

The Waste Management Plan must propose whether the Council or a private waste contractor (or both) will be collecting landfill waste and recyclables.

Waste collection from laneways

Waste collection vehicles must be able to have clear access for all collections. Facilitating access may require the installation of no stopping areas during collection times. As appropriate to the development, reversing of vehicles should be avoided, and where this is necessary, measures must be taken to reduce the risks.

The use of Council laneways for waste collection services is to be avoided where possible. However, Council recognises that in some cases such as Activity Centres, the use of laneways for truck access is an acceptable outcome when a distinction is made between using the laneway for waste vehicle access (which may be suitable) and using the laneway to store and collect waste (which may not be suitable), unless no other acceptable alternative exists for constrained sites.

Signage

Details of signage relating to waste collection should be provided in the Waste Management Plan.
**Hard waste**

Council offers collections to residents who pay a ‘garbage charge’ in addition to their rates. Furniture items from multi-unit developments are not permitted on the kerb for collection, unless specified by Council. Appropriate on-site storage and collection of hard waste items should be arranged. Multi-unit (high rise) developments must provide on-site hard waste storage at a rate of 3m² for the first 100 dwellings, increasing by 3m² per additional 100 dwellings (up to a maximum requirement of 10m²). A hard waste allocation in excess of 10m² is allowed at the developers’ discretion.

Access and collection methodology are to be specified in the planning proposal. Collection is usually coordinated by the building manager.

---

**Organic waste**

Council operates an opt-in (fee for service) fortnightly kerbside collection of organic waste (i.e. mixed garden and food waste). If kerbside organic waste collections are planned, adequate space will be required to store the material for collection and access must be provided for waste contractors.
Charity goods

Council recommends all residential multi-unit developments with more than 50 apartments provide space for one charity bin. Charity bins are available in various sizes, however 1m³ is adequate for most developments.

Most charities offer a free service, including bin supply and collection, and will generally collect clothing, used furniture and home wares in good condition.

E-waste

Council recommends multi-unit developments with more than 50 apartments provide appropriate infrastructure to collect electronic (or e-waste) to be picked up for recycling. Around 1m² storage capacity is adequate for most developments.
Quality and Scope of Waste Management Plans

Please ensure all details are provided in a waste management plan submission are clear, concise and address all relevant sections of the guidelines.

A fee may be applied for each waste management plan resubmitted for review and assessment.

Reference documents

Victorian State Government’s Better Apartments Design Standards Plan Melbourne 2017-2050


Council has developed best practice waste management templates which are provided to help developers ensure that best practice waste management systems are designed into proposals before they are submitted to Council.
Moonee Valley Language Line

<table>
<thead>
<tr>
<th>Language</th>
<th>Code</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic</td>
<td>9280 0738</td>
<td></td>
</tr>
<tr>
<td>廣東話</td>
<td>Cantonese</td>
<td>9280 0739</td>
</tr>
<tr>
<td>Hrvatski</td>
<td>Croatian</td>
<td>9280 0740</td>
</tr>
<tr>
<td>Ελληνικά</td>
<td>Greek</td>
<td>9280 0741</td>
</tr>
<tr>
<td>Italiano</td>
<td>Italian</td>
<td>9280 0742</td>
</tr>
<tr>
<td>Somali</td>
<td>Somali</td>
<td>9280 0743</td>
</tr>
<tr>
<td>Español</td>
<td>Spanish</td>
<td>9280 0744</td>
</tr>
<tr>
<td>Türkçe</td>
<td>Turkish</td>
<td>9280 0745</td>
</tr>
<tr>
<td>Việt-ngu</td>
<td>Vietnamese</td>
<td>9280 0746</td>
</tr>
</tbody>
</table>

All other languages 9280 0747

National Relay Service 13 36 77 or relayservice.com.au

This publication is available in alternative accessible formats on request.
Planning and Environment Act 1987

MOONEE VALLEY PLANNING SCHEME

AMENDMENT C207

EXPLANATORY REPORT

Who is the planning authority?

The Amendment has been prepared by the Moonee Valley City Council, which is the planning authority for the Amendment.

Land affected by the Amendment

The Amendment applies to all land within the Moonee Ponds Major Activity Centre as identified in the MPAC to 2040: Moonee Ponds Activity Centre Local Plan (2019).

What the Amendment does

The Amendment proposes to implement the land use and development directions of the MPAC to 2040: Moonee Ponds Activity Centre Local Plan (2019) (Local Plan) and associated background documents.

Specifically, the Amendment proposes to:

1. Amend Clause 21.06 (Built Environment) to reflect the directions of the Local Plan.

2. Amend Clause 21.07 (Activity Centres) to introduce specific objectives and strategies relating the Moonee Ponds Activity Centre, and include the following documents as a reference documents:
   - MPAC to 2040: Moonee Ponds Activity Centre Local Plan (Moonee Valley City Council, 2019)
   - Moonee Ponds Activity Centre: Built Form (Hodyl & Co Pty Ltd, 2019)
• Moonee Ponds Activity Centre: Streetscapes and Public Spaces (Moonee Valley City Council, 2019)
• Moonee Ponds Activity Centre: Public Open Spaces (Moonee Valley City Council, 2019)
• Moonee Ponds Activity Centre: Transport (Traffic Group, 2019)
• Moonee Ponds Activity Centre: Employment and Floor Space (SGS Economics and Planning, 2019)
• Moonee Ponds Activity Centre: Affordable Housing (SGS Economics and Planning, 2019)
• Moonee Ponds Activity Centre: Wind (Moonee Valley City Council, 2019)
• Waste Management Plans – Guidelines for Planning Applicant (Moonee Valley City Council, 2019)

3. Replace Schedule to Clause 37.08 (Activity Centre Zone) with a new schedule that applies to the Moonee Ponds Activity Centre.
4. Introduce a new Schedule to Clause 45.09 (Parking Overlay) with a new schedule that introduces maximum parking rates for all uses in the Moonee Ponds Activity Centre.
5. Amend Schedule to Clause 72.03 (What Does this Planning Scheme Consist of?) to introduce a new map relating to the Moonee Ponds Activity Centre.
6. Amend Schedule to Clause 72.08 (Background Documents) to introduce all background documents relating to the Moonee Ponds Activity Centre.

Strategic assessment of the Amendment

Why is the Amendment required?

The Amendment is required to implement the land use and development directions of the MPAC to 2040: Moonee Ponds Activity Centre Local Plan (2019) (Local Plan) and associated background documents in the Moonee Ponds Activity Centre. The Amendment will provide the activity centre with a contemporary land use and development framework that reflects the vision and strategic intent set by the MV2040 Strategy, Council’s long-term plan for a healthy Moonee Valley.

Moonee Ponds Activity Centre is identified as Major Activity Centre in Plan Melbourne 2017-2050: Metropolitan Planning Strategy (2017).

The Activity Centre Zone (ACZ) applying to the Moonee Ponds Activity Centre was introduced to the Moonee Valley Planning Scheme via Amendment C100 on 30 March 2015. Amendment C100 gave effect to the objectives and strategies contained within the Moonee Ponds Activity Centre Structure Plan (2010) (updated 2012). On 30 March 2015, Amendment C155 also applied the ACZ to the Moonee Valley Racecourse under Section 20(4) of the Planning and Environment Act 1997. The Moonee Valley Racecourse development proposal was previously subject to the Moonee Valley Racecourse Redevelopment Advisory Committee (Advisory Committee) established in November 2012 to hear all relevant matters associated with the proposed redevelopment of the Moonee Valley Racecourse. The recommendations of the Advisory Committee were introduced to the Moonee Valley Planning Scheme on 25 September 2014 via Amendment C120.

Activity Centre Pilot Program

In recent years there has been an increase in the scale of development proposed and approved in the Moonee Ponds Activity Centre. The subsequent built form outcomes have not aligned with the objectives of the Moonee Ponds Activity Centre Structure Plan (2010) (updated 2012) and did not meet the community expectation for the area.

In December 2016, the Moonee Ponds Activity Centre was announced as one of the pilot locations in the State Government’s Activity Centre Pilot Program (Pilot Program). A key purpose of the Pilot Program was to identify how planning controls could be used to provide greater clarity and certainty about development heights in activity centres, and to ensure the community have a clearer understanding of the form of new development expected in the activity centres.
On 12 October 2017, Amendment C183 introduced mandatory maximum building height controls for the Moonee Ponds Activity Centre (Precinct 1 – 8) on an interim basis until 20 September 2018. During this period, Council commenced a comprehensive review of the Moonee Ponds Activity Centre that considered built form, transport, streetscapes, open space, employment and floor space, affordable housing and wind. On 27 September 2018, Amendment C197moon extended the expiry date of the interim controls to 30 September 2019 with DELWP noting that an extension was required to allow for the significant strategic work to be completed. On 20 September 2019, Amendment C208moon further extended the interim controls until 30 September 2020 to allow sufficient time to progress a full planning scheme amendment for permanent controls.

MPAC to 2040: Moonee Ponds Activity Centre Local Plan

The Local Plan has been developed in line with Moonee Valley City Council’s long-term plan, MV2040 Strategy. The Local Plan summarises the key directions from the following documents:
- Moonee Ponds Activity Centre: Built Form
- Moonee Ponds Activity Centre: Streetscapes and Public Spaces
- Moonee Ponds Activity Centre: Public Open Spaces
- Moonee Ponds Activity Centre: Transport
- Moonee Ponds Activity Centre: Employment and Floor Space
- Moonee Ponds Activity Centre: Affordable Housing
- Moonee Ponds Activity Centre: Wind
- MV2040 Action Plan: Community Facilities (Moonee Valley City Council, 2018)
- Waste Management Plans – Guidelines for Planning Applicants

The Local Plan provides a tailored response for the Moonee Ponds Activity Centre to ensure forecast growth occurs in a way that successfully balances the valued attributes of the activity centre and delivers a high-quality living and working environment.

The Amendment proposes to implement the following key controls:

<table>
<thead>
<tr>
<th>Control</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandatory Floor Area Ratios (FARs)</td>
<td>Ensures new development provides a contextual response to the site considering the overall vision for the activity centre and the specific precinct objectives. The FAR will enable more site responsive design to be delivered, rather than a typical ‘podium and tower’ typology across the centre.</td>
</tr>
<tr>
<td>Discretionary maximum building heights</td>
<td>The FARs are applied with a discretionary building height (metres) to provide guidance of the expected typology and scale of new development.</td>
</tr>
<tr>
<td>Mandatory maximum building height – Precinct 4: Puckle Street Retail Core</td>
<td>Applies only to Puckle Street and is consistent with Planning Practice Note: 5b: Role of Mandatory Provisions in Planning Schemes due to Puckle Street’s high heritage value.</td>
</tr>
<tr>
<td>Discretionary side and rear setbacks and building separation</td>
<td>Improves internal and public amenity for new development and maximises development equity.</td>
</tr>
<tr>
<td>Mandatory rear setbacks – certain locations</td>
<td>Applies only to rear to rear boundary locations and is required where there is no laneway to separate sites.</td>
</tr>
<tr>
<td>Discretionary street wall heights and building setbacks (above the street wall)</td>
<td>Provides a contextual response that relates to street widths, sensitive residential interfaces and heritage buildings.</td>
</tr>
<tr>
<td>Mandatory and discretionary solar access controls</td>
<td>Protects key pedestrian streets and public open space from overshadowing, and effectively limits building heights on some sites.</td>
</tr>
<tr>
<td>Affordable housing uplift</td>
<td>Facilitating the delivery of much needed affordable housing in the municipality, the controls enable development to</td>
</tr>
</tbody>
</table>
exceed the mandatory FAR by a maximum of 0.5:1 where provision is made for affordable housing (either by cash or dwellings).

| Discretionary residential interfaces and ground floor setbacks | Provides sensitive interfaces to low scale residential uses on the activity centre boundary, reduces visual bulk from the street level, and facilitates an improved public realm. |
| Discretionary wind assessments | Ensures new development minimises negative wind impacts for pedestrian comfort and safety at the street level. |
| Mandatory minimum bicycle parking rates | Supports the objective to improve cycling accessibility and encourage a modal shift to sustainable transport modes. |
| Mandatory maximum car parking rates | Leverages the activity centre’s proximity to various public transport options and Melbourne CBD, and reduces reliance on vehicle and support alternative modes of transport. |

The suite of controls proposed will provide greater clarity and certainty to the Moonee Valley community regarding the development outcomes in the Moonee Ponds Activity Centre.

The Amendment proposes no change to the specific controls for Precinct 9 – Racecourse.

**How does the Amendment implement the objectives of planning in Victoria?**

The amendment implements the following objectives of planning in Victoria, set out in section 4(1) of the Planning and Environment Act 1987, in particular:

(a) To provide for the fair, orderly, economic and suitable use, and development of the land.

(b) To ensure a pleasant, efficient and safe working, living and recreational environment for all Victorians and visitors to Victoria.

(c) To facilitate development in accordance with the objectives of planning in Victoria.

The Amendment will provide for the orderly use and development in the Moonee Ponds Activity Centre consistent with these objectives.

**How does the Amendment address any environmental, social and economic effects?**

**Environmental**

The Amendment is expected to have positive environmental impacts by:

- Guiding growth to locations where existing infrastructure can be leveraged resulting in a lower environmental impact.
- Enhancing the urban forest and increasing greening initiatives.
- Encouraging waste avoidance, reuse and recycling.
- Integrating biodiversity and sustainability into decision making.
- Facilitating sustainable transport alternatives such as walking and cycling, and encouraging public transport usage.

**Social and Economic**

The Amendment is expected to have a positive social and economic impact for the municipality by:

- Providing the community with greater certainty and clarity of controls in the Moonee Ponds Activity Centre.
- Providing the framework for decision making, which Council will use to strategically accommodate growth in activity centre.
- Enhancing commercial and community opportunities in the activity centre.
- Improving the quality of built form, the attractiveness of streetscapes and overall safety and amenity in the public realm.
• Seeking to provide more affordable housing options.

Does the Amendment address relevant bushfire risk?
The land affected by the Amendment is not located within an area of identified bushfire risk.

Does the Amendment comply with the requirements of any Minister’s Direction applicable to the amendment?
The Amendment is consistent with the Ministerial Direction on the Form and Content of Planning Schemes under Section 7(5), Ministerial Direction No. 9 Metropolitan Planning Strategy made under Section 12(2) and Ministerial Direction No. 11 Strategic Assessment of Amendment made under Section 12(2)(a) of the Planning and Environment Act 1997.

How does the Amendment support or implement the Planning Policy Framework and any adopted State policy?
The Amendment supports the Planning Policy Framework in the following ways:

• Clause 11 (Settlement) by providing a suite of control to appropriately respond to the needs of existing and future communities, and to facilitate sustainable development.
• Clause 15 (Built Environment and Heritage) by encouraging development and urban environments that are safe, healthy and attractive.
• Clause 16 (Housing) by providing for housing diversity and housing affordability, and ensuring the efficient provision of supporting infrastructure.
• Clause 17 (Economic Development) by ensuring the activity centre has opportunities for local employment, and commercial growth and viability.
• Clause 18 (Transport) by facilitating higher density development close to established public transport nodes, and providing access to social and economic opportunities.

How does the Amendment support or implement the Local Planning Policy Framework, and specifically the Municipal Strategic Statement?
The Amendment supports the Local Planning Policy Framework, and specifically the Municipal Strategic Statement, in the following ways:

• Clause 21.04 (Sustainable Environment) by encouraging significant tree planting, environmentally sustainable design, and water sensitive urban design.
• Clause 21.05 (Housing) by facilitating residential development in existing activity centres close to public transport, services and shops.
• Clause 21.06 (Built Environment) by ensuring new development complements highly valued attributes of the activity centres (such as heritage) provide quality urban design outcomes.
• Clause 21.07 (Activity Centres) by providing a framework to support Moonee Ponds Activity Centre as the primary activity centre in Moonee Valley.
• Clause 21.09 (Transport) by prioritising walking and cycling in the activity centre, and encouraging public transport use.

Does the Amendment make proper use of the Victoria Planning Provisions?
The Amendment makes proper use of the appropriate zoning and overlay tools available under the Victoria Planning Provisions to achieve the strategic objectives of the Moonee Valley Planning Scheme.
The Amendment has been prepared in accordance with Planning Practice Note 58: Structure Planning for Activity Centres, Planning Practice Note 59: Role of Mandatory Provisions in Planning Schemes and Planning Practice Note 60: Height and Setback Controls for Activity Centres.

How does the Amendment address the views of any relevant agency?

The views of relevant agencies were considered in the development of the Local Plan (which guides the preparation of the Amendment). The agencies include the Department of Transport and VicTrack.

All relevant agencies and stakeholders will be consulted during the public exhibition period for the Amendment.

Does the Amendment address relevant requirements of the Transport Integration Act 2010?

The Amendment carefully considers transport access and movement for the activity centre, which includes walking, cycling, private vehicle, freight and public transport connections. The Amendment will not have a significant impact on the transport system of on the Transport Integration Act 2010.

Resource and administrative costs

What impact will the new planning provisions have on the resource and administrative costs of the responsible authority?

The Amendment is not expected to impose additional resource or administrative costs on the responsible authority. The Amendment will provide a clear framework that will provide greater certainty and clarity to the community and other stakeholders regarding land use and development in the Moonee Ponds Activity Centre.

Where you may inspect this Amendment

The amendment is available for public inspection, free of charge, during office hours at the following places:

Moonee Valley City Council
9 Kellaway Avenue
Moonee Ponds VIC 3039

The Amendment can also be inspected free of charge at the Department of Environment, Land, Water and Planning website at www.planning.vic.gov.au/public-inspection.

Submissions

Any person who may be affected by the amendment may make a submission to the planning authority. Submissions about the Amendment must be received by 28 February 2020.

A submission must be sent to:

Strategic Planning Department
Moonee Valley City Council
PO Box 126
Moonee Ponds VIC 3039

Email: strategicplanning@mvcc.vic.gov.au

Panel hearing dates

In accordance with clause 4(2) of Ministerial Direction No.15 the following panel hearing dates have been set for this amendment:

- directions hearing: Week commencing 15 June 2020
• panel hearing: Week commencing 27 July 2020
Planning and Environment Act 1987

MOONEE VALLEY PLANNING SCHEME

AMENDMENT C207moon

INSTRUCTION SHEET

The planning authority for this amendment is the Moonee Valley City Council.

The Moonee Valley Planning Scheme is amended as follows:

Planning Scheme Maps

The Planning Scheme Maps are amended by a total of 1 attached map sheet.

Overlay Maps

1. Insert new Planning Scheme Map No. 12PO in the manner shown on the attached map marked "Moonee Valley Planning Scheme, Amendment C207moon.

Planning Scheme Ordinance

The Planning Scheme Ordinance is amended as follows:


4. In Zones – Clause 37.08, replace Schedule 1 with a new Schedule 1 in the form of the attached document.

5. In Overlays – Clause 45.09, insert a new Schedule 2 in the form of the attached document.

6. In Operational Provisions – Clause 72.03, replace the Schedule with a new Schedule in the form of the attached document.

7. In Operational Provisions – Clause 72.08, replace the Schedule with a new Schedule in the form of the attached document.

End of document
MOONEE VALLEY PLANNING SCHEME

BUILT ENVIRONMENT

Neighbourhood Character

Council recognises that residents are attracted to Moonee Valley because of an appreciation of the aesthetics of the area and aims to provide high quality residential neighbourhoods for future generations. Council supports urban consolidation within Moonee Valley. However, it is recognised that increased residential density is often contentious among residents where building design bears no relation to the established streetscape and street interfaces are poor.

Council acknowledges that all streetscapes within the city possess unique qualities that deserve recognition and careful design responses such as architectural styles, dwelling setbacks, pattern of built form, building materials and landscaping. Council has prepared ‘Neighbourhood Character Precinct Profiles’ for each Neighbourhood Character Area which will be used in the assessment of all applications.

Moonee Valley’s residential neighbourhoods include a number of areas that have been identified for their highly consistent and valued character. These areas of significant neighbourhood character may be valued for a range of reasons such as showing a particularly consistent building form, scale or siting; as an example of a rare or exemplary form of residential development; displaying a high number of intact buildings from a particular era of the City’s development; or their particular subdivision quality.

Objective 1

- To ensure new development is in accordance with the preferred character of each residential precinct as outlined in the Neighbourhood Character Precinct Profiles 2012,

Strategy

- Maintain and enhance residential streetscape quality and character.
- To ensure that new development makes a positive contribution to the appearance and amenity of the streetscape.
- Ensure new residential development considers the design objectives as outlined in the Neighbourhood Character Precinct Profiles 2012 as appropriate.
- Ensure the siting of new development contributes to the preferred character of the neighbourhood.
- Ensure that the distinct neighbourhood character attributes within identified significant neighbourhood character areas within the municipality are retained and enhanced.

Heritage

The Moonee Valley Heritage Strategy 2011 acknowledges the importance of Moonee Valley’s heritage places to the built and natural environment. Moonee Valley has extensive areas and numerous individual places of heritage significance and the protection and conservation of these heritage assets is required.

In conserving areas of heritage significance there is also a need to provide for adaptive reuse and change of buildings.

In addition to protecting existing heritage places, Council is committed to continually undertake and implement heritage studies to assess places and precincts for their heritage significance.

Objective 1

- To protect and conserve places of cultural heritage significance including buildings, streetscapes, gardens and archaeological sites.
MOONEE VALLEY PLANNING SCHEME

Strategies

- Ensure all heritage places in Moonee Valley are identified, assessed and documented.
- Provide protection for all heritage places of natural and cultural significance by inclusion in the appropriate overlays.
- Promote the identification, protection and management of Aboriginal cultural heritage.
- Reveal and enhance the significance of heritage places by:
  - Encouraging maintenance and repair rather than replacement, and accurate restoration and reconstruction of significant fabric.
  - Discouraging inappropriate additions and alterations and demolition.
- Ensure the significance of heritage precincts is not diminished by:
  - New development that is inappropriate due its scale, siting or design.
  - Incremental loss of buildings and other features including in the public realm that contribute to its significance.
- Consider the cumulative effect of incremental changes to heritage places over time.
- Ensure that heritage places are used and occupied.
- Work with Heritage Victoria to ensure protection of archaeological remains.

Implementation

- Apply the Heritage Policy (22.01) to the assessment of applications under the Heritage Overlay.
- Promote the use of the City of Moonee Valley Heritage Guidelines 2016.

Safety, Health and Wellbeing

Council recognises that the design of the built environment can influence the incidence of crime and feelings of safety within a city. It also acknowledges that aspects of the natural and built environment can promote, or be a barrier to public health and wellbeing.

People should feel safe getting around Moonee Valley, whether crossing the road, on public transport, walking about the streets or accessing facilities. In addition to being safe, public and private spaces should also be accessible and promote activity and interaction.

Council supports active planning and design principles that promote opportunities for formal and informal leisure and recreation activities, accessible transport and social connection.

Council recognises that a safe and healthy city must support the varying needs of people at different stages in the life course, including creating a child-friendly and age-friendly municipality.

Council supports the establishment of urban agriculture and localised food supplies to contribute to food security and to the liveability of the municipality.

Objective 1

- To ensure new developments create safe environments.

Strategies

- Encourage the Complete Street principles to design safe, attractive and multipurpose streets.
- Encourage the design of buildings, subdivisions, car parks and public open space that maximises natural surveillance to provide for safe neighbourhoods.
- Encourage building design with active street frontages.
MOONEE VALLEY PLANNING SCHEME

- Discourage designs that provide opportunities for concealment and entrapment along paths and in community spaces.

Objective 2
- To ensure that the design of the public and private environment supports accessibility, wellbeing and healthy living.

Strategies
- Encourage the application of universal design principles that improve accessibility to all aspects of the built environment, including the maintenance and retrofitting of existing building stock, roadways, pedestrian and bicycle paths, and public transport infrastructure.
- Encourage major urban development projects to incorporate landscaped pedestrian and bicycle paths as links to open space where possible.
- Encourage opportunities for social interaction at interfaces between public and private areas, spaces and facilities within multi-storey residential and mixed use development.
- Encourage the provision of public art in new development.

Objective 3
- To provide food friendly neighbourhoods and increase resident and community participation in food production.

Strategies
- Design subdivisions and new buildings to provide for private and, where suitable, shared garden space for food production.
- Prioritise passive solar design principles for garden design to maximise their food growing potential.
- Encourage roof top and vertical gardens to provide opportunity for food growing.

Objective 4
- Ensure that access to healthy food choices is supported by the built environment.

Strategies
- Encourage adequate provision and location of food retail outlets across the municipality.
- Encourage development around activity nodes and good public transport options which will enhance access to food premises.
- Support the establishment of farmers markets and the operation of food carts/vans.
- Support the establishment of community gardens.

Urban Design
The community’s increasingly demanding high quality architectural and urban design outcomes for built form and open spaces. The appearance of residential, commercial and industrial areas is considered important in maintaining a strong level of civic pride.

The siting and design of buildings can have a critical impact on visual appearance within urban streetscapes. Council is keen to ensure that sustainability principles strongly influence the design, siting and servicing of all buildings.

Objective 1
- To achieve contemporary development that is innovative, legible and designed in a manner that responds to its location and context.
MOONEE VALLEY PLANNING SCHEME

Strategies

- Encourage development that provides an appropriate degree of visual interest and design articulation and a high standard of amenity for residents.
- Enhance and create visual and physical links to adjoining streets, public transport and/or key community facilities when developing large or consolidated sites.
- Ensure the siting (including setbacks and site coverage) of new development responds to the opportunities, constraints and features of the site.
- Ensure development minimises off-site amenity impacts.
- Ensure new development presents integrated building forms that have a sense of address.
- Encourage new development to apply design techniques (including façade variation, contrast/repetition, colour, texture and detail) that will integrate a building with its surroundings and create attractive and interesting forms.
- Ensure that new development highlights key corners or intersections through the use of design projections, detailing and massing that presents to its surroundings and street frontages.

Design new development to reduce the impact of wind to ensure the safety and comfort of pedestrians.

Ensure new development does not cast additional overshadowing on key pedestrian streets and public open spaces.

- Encourage new developments up to but not exceeding preferred heights as outlined in relevant design guidelines, overlays or plans. In cases where a development seeks to exceed preferred maximum building heights it must clearly demonstrate a net community benefit to be delivered through this increased height, and an exemplary urban design outcome (this does not apply to the Moonee Ponds Activity Centre).

Where relevant all new development must be designed to protect flight safety by recognising its proximity to Essendon Airport and the height restrictions within airspace prescribed under the Airports Act 1996.

Objective 2

To ensure that new development of five or more storeys is designed and located to complement the surrounding neighbourhood, and is considerate of potential off site impacts.

Strategies

- Ensure development is consistent with the Guidelines for Higher Density Residential Development (Department of Sustainability and Environment 2004), and the City of Moonee Valley Design Guidelines for Multi-storey Residential Buildings, December 2003.
- Ensure that taller built form is located within areas that have been identified for High to Substantial Housing Intensification as defined at Clause 21.05-1.
- Ensure that all new development of five or more storeys makes a positive contribution to an area’s character, protecting and contributing to its valued natural, built and community qualities.
- Ensure that all new development of five or more storeys reinforces the character of the area. Building height, scale and massing are to be derived from the local context, street conditions and local character objectives.
- Ensure that all new development of five or more storeys provides an appropriate relationship with adjoining buildings, separation between buildings to maximise light, air and outlook.
- Encourage new development of five or more storeys to achieve the highest architectural standards possible. Design should give careful consideration of building scale and form, movement patterns, and external spaces and their interrelationships.
- Ensure that new development of five or more storeys contributes to the creation of private and public open spaces that are accessible, attractive, safe and comfortable for their users.
MOONEE VALLEY PLANNING SCHEME

Signage

Council recognises that businesses have a right to advertising and well-designed signs that provide information and create interest in the streetscape have an important role in the built environment.

Within Moonee Valley there is a variety of industrial and commercial areas. The expectation for neighbouring residential areas is for a high level of amenity and privacy, with minimal intrusion from business use and signage which is not part of the character of these areas.

Some industrial areas and open spaces along freeways and declared main roads offer some limited opportunities for promotional high wall and sky signs in locations with long distance visibility. Generally, these signs are illuminated to maximise their visibility subject to consideration of the impact of such signage on the amenity of the surrounding area.

There is also a wide variety of shopping centres that vary in size, character and the role in which they serve the community. Council promotes a co-ordinated approach to advertising in terms of common themes, colours and building identification.

Objective 1

- To ensure that signage is compatible with the character of the area and its local streetscapes.

Strategies

- Ensure that signs do not cause loss of amenity or adversely affect the natural or built environment, or the safety of efficiency of a road.
- Ensure that advertising signage is considered in accordance with the “Policy Guidelines” at Clause 21.06-5.

Policy Guidelines (exercise of discretion)

- Policy guidelines for signage in residential areas are found at Clause 52.05-3.

For non-residential uses in residential areas, Council will consider:

- Business identification signage having regard to the need to avoid visual clutter.
- Illumination of these signs only where it can be shown that the impact from light spillage on adjoining residential areas is minimal.

In Industrial areas, Council will consider:

- Business and identification signs which are necessary to identify the location of the premises and the use of the building.
- Business directory signs for buildings with multiple occupants/uses.
- Internally illuminated pole signs where the building is set back from the street frontage and for uses such as petrol filling stations and car sales.
- Architecturally innovative sign structures that demonstrate a regard to the building design, scale and presentation and to the surrounding area.
- Promotional signage but only where it can be demonstrated that the amenity of the area will not be detrimentally affected and the sign will not obscure existing signage.

Along or near freeways and main roads, Council will consider:

- Innovative and creative signage which positively contributes to the appearance of the area and enhances and adds interest to the locality.
- Architecturally designed and innovative supportive structures.
- Large promotional panel or sky signs but only where they are located in industrial zones and where it can be demonstrated that the signs have been designed to minimise intrusion on the skyline, not dominate the area of building walls and parapets and not have a negative impact on traffic safety.
MOONEE VALLEY PLANNING SCHEME

- Signs that contain no flashing or intermittent lighting.
- Signs that are designed to become an architectural feature.
- The illumination of promotional signs which have appropriate baffling to minimise light spillage onto adjoining land.

In commercial areas, Council will consider the use of:
- Suspended under-verandah sign, including internally illuminated signage.
- Ground and first floor window signs.
- Awning fascia and parapet signs and first floor wall face signs.
- A-frame signs.
- Above verandah signage at 90 degrees angle to the building, if it is appropriate to the scale of the building.
- Projecting above-awning parapet level signs.
- Free-standing pole signs of appropriate scale to the buildings with a front setback.
- Side wall, upper storey panel signs which are of appropriate scale to the building.

21.06-6
1/08/2017
0123

Implementation
- Apply the Heritage Overlay to identified heritage places.
- Implement updated heritage precinct citations.
- Apply the Neighbourhood Character Overlay to areas which have been identified as having a significant neighbourhood character.
- Apply the Design and Development Overlay to control built form outcomes based on adopted built form or urban design guidelines.

21.06-7
29/03/2016
0177

Further Strategic Work
- Review the Moonee Valley Neighbourhood Character Study prior to the next Planning Scheme Review in line with relevant VCAT decisions and any other analysis.
- Develop a consolidated permit exemptions policy for heritage precincts and ensure all precinct citations are revised to include identification of contributory and non-contributory buildings/structures.
- Develop Heritage Design Guidelines to better guide decision-making.
- Investigate the places of potential cultural significance recommended for further research in the Moonee Valley Thematic Environmental History.
- Undertake an Aboriginal Cultural Heritage Study.
- Prepare a Food Security Policy.
- Develop an overarching municipal-wide Urban Design Policy to guide built form outcomes.
- Prepare Airport West Design and Development Guidelines.
- Consider the preparation of Design and Development Guidelines for industrial development.
- Develop a Laneway Development Policy.
- Update the Waste Management Guidelines to provide clearer guidance for waste management for multi-storey developments.
- Complete Stage 1 of the Debeny’s Precinct – Structure Plan, in consultation with the Department of Health and Human Services and include as a Reference Document in this Scheme.
MOONEE VALLEY PLANNING SCHEME

- Develop Stage 2 of the Debneys Precinct – Structure Plan, in consultation with the Department of Health and Human Services.
- Complete Stage 2 of Debneys Precinct – Structure Plan prior to the completion of the redevelopment of the Flemington Housing Estate envisaged under Stage 1 of the Structure Plan.

Reference Documents

- Moonee Valley Neighbourhood Character Study, Planisphere, 2012
- Mt Alexander Road Corridor Urban Design Guidelines, 2010
- Essendon Conservation Study, Graeme Butler, 1985
- Flemington and Kensington Conservation Study (Individual data-sheets, City of Moonee Valley), Graeme Butler, 1995
- Moonee Valley Heritage Gap Study, Heritage Alliance, 2005
- Moonee Valley Heritage Strategy, Moonee Valley City Council, 2011
- Review of Heritage Overlay Precincts Report, David Helms Heritage Planning 2012
- Moonee Valley Thematic Environmental History, Living Histories, 2012
- Moonee Valley Thematic Places Heritage Study, Context Pty Ltd, 2012-14
- Heritage Overlay Review, David Helms Heritage Planning, 2014
- Moonee Valley Heritage Study, Context Pty Ltd, 2015
- City of Moonee Valley Heritage Guidelines, City of Moonee Valley 2016

Moonee Ponds Activity Centre: Built Form (Bodyl + Co, 2019)
Moonee Ponds Activity Centre: Wind (Moonee Ponds Activity Centre, 2019)
Moonee Valley Planning Scheme

Moonee Valley has six activity centres identified in Plan Melbourne, as well as a number of neighbourhood activity centres. Each has its own role and function. This clause focuses on the implementation of the respective structure plan for each activity centre identified in Plan Melbourne.

Moonee Ponds Major Activity Centre

The central hub of Moonee Ponds functions as a regional retail centre and the major centre for professional and financial services in Melbourne’s northwest region. Its proximity to key tourism venues, good public transport and a community with a high level of disposable income are significant competitive advantages.

Moonee Ponds Activity Centre is the primary activity centre in Moonee Valley and plays an important role as a regional centre in Melbourne’s north-west.

Vision

- To develop the activity centre as a destination for retail, business, civic, cultural, creative and entertainment uses; the area into one of the region’s most vibrant, pedestrian-centric, culturally diverse and historic areas.

Strategy

- Encouraging higher-density development that respects the local heritage attributes of the area.
- Designing new development to be sensitive to the surrounding residential areas, particularly where they directly interface.
- Encouraging the activation of the laneway network, including through greening initiatives and public art.
- Connecting and activating laneways to create a cohesive network for improved pedestrian permeability and vibrancy.
- Supporting sustainable transport modes by providing high quality bicycle and walking infrastructure and reducing the reliance on the private vehicle.

Ensure that any proposed use or development within the Moonee Ponds Activity Centre is generally consistent with the Moonee Ponds Activity Centre Structure Plan 2010.

Policy Guidelines (Exercise of discretion)

- Ensure that development achieves a compact urban form that consolidates land use so as not to underutilise land for its intended purpose and proposed intensity.
- To reinforce the Moonee Ponds Activity Centre’s local and regional role in providing a diverse and comprehensive range of community and cultural services.
- Improve traffic management, car parking facilities and pedestrian networks within and surrounding the centre.
- Discourage the expansion of gambling venues or electronic gaming machines within the centre.
- Continue to support and encourage medium to higher density development in the Moonee Ponds Activity Centre.
- Ensure that the scale of new development will not be detrimental to residential areas surrounding the activity centre.
- Encourage increased housing densities that provide a range of densities and housing types as provided for in the Activity Centre Zone.
Airport West Activity Centre

Airport West is a triangular-shaped suburb with significant transport infrastructure along its borders. The centre comprises of a mix of retail, commercial, industrial and residential development. It is anchored by the Westfield Shopping Centre and Skyways Tavern to the north, which form the retail core.

Vision

- To develop the centre into a vibrant, attractive, safe and sustainable activity hub which strengthens the identity of Airport West, maintains its varied commercial function and strong employment base, and defines the character of the area through built form and landscape treatments.

Strategy

- Ensure that any proposed use or development within the Airport West Activity Centre is generally consistent with the Airport West Activity Centre Structure Plan 2008.

Policy guidelines (Exercise of discretion)

- Encourage the growth of retail, commercial and commercial activities at the Airport West Shopping Centre and adjacent mixed use precinct.
- Encourage an increase in residential densities and affordable housing opportunities through development near the Airport West Shopping Centre to the north and Keilor Road to the south.
- Encourage appropriate leisure, recreational and entertainment uses near and within the Airport West Shopping Centre.
- Support commercial uses, including an office at the Hood Street and Matthews Avenue gateway where it achieves the desired built form outcome.
- Enhance the image and identity of the centre through changes to the built form.
- Establish an active streetscape to Matthews Avenue by encouraging building which provide articulation and visual interest.
- Facilitate increased building heights which provide opportunities for growth and improvement while still considering any residential amenity impacts.
- Enhance the urban structure of the centre through development that emphasises the precinct gateways, landmark sites and important views.
- Ensure built form integrates with the public realm through active frontages, maintaining solar access, preventing negative wind effects and buildings which have a human scale.
- Encourage all new development to incorporate sustainable building practices and water sensitive, urban design.
- Support the development of a public transport interchange to facilitate convenient transfers between public transport services.
Figure 2 - Airport West Structure Plan
North Essendon Activity Centre

The North Essendon Activity Centre is a linear retail centre, including the commercial core of Mt Alexander Road within the suburb of North Essendon and extending outwards to include a small amount of established residential land on the periphery.

Vision

- To develop the centre into a vibrant, safe and sustainable urban village where complimentary residential, business, leisure and community land uses and development are co-located to create a strong sense of local identity and gateway to the inner-northern suburbs of Melbourne.

Strategy

- Ensure that any proposed use or development within the North Essendon Activity Centre is generally consistent with the North Essendon Activity Centre Structure Plan 2011.

Policy guidelines (Exercise of discretion)

- Encourage the establishment of upper level residential uses (shop top housing) within the activity area.
- Encourage all new retail and commercial developments within the activity area to provide active ground floor frontages.
- Provide well-located, accessible and safe car parking areas which do not visually dominate the public realm.
- Enhance the core retail area as a community focal point of the activity centre and maintain it as a location for local and specialty shopping.
- Encourage stronger ‘green’ connections from the activity centre to existing, substantial open spaces surrounding the activity area.
- Encourage residential densities around the centre which are respectful of neighbourhood character and amenity.
- Ensure new development provides a sensitive and appropriate interface to adjoining streetscapes, parkland (where relevant), buildings and established residential areas.
- Ensure new development at gateway locations and key sites acts as a focal point through high quality architecture and the use of appropriate building detailing, material differentiation, or height, as appropriate to the context.
- Reduce pedestrian, vehicular and cyclist conflicts through the centre.
- Reduce vehicular conflict at the Leake St/Glass St and Mt Alexander Road intersection.
- Improve the safety of the Mt Alexander Road/Lincoln Road/Keller Road intersection for all road users.
- Improve public transport movement and facilities within the activity centre.
- Improve the safety of existing pedestrian crossings within the activity centre.
- Provide improved bicycle amenities throughout the activity centre, including bicycle parking, and storage areas.
- Improve on and off road bicycle facilities to better link to key destinations and public transport nodes.
- Mitigate the impact of any new development proposals on access to and the operation of public transport, walking and cycling by encouraging an Integrated Transport Plan to be provided with any new applications.
Figure 3 - North Essendon Structure Plan
Keilor Road Activity Centre

The Keilor Road Activity Centre encompasses land around the core commercial area of Niddrie, and North Essendon to the east. The centre is a predominantly linear strip that extends outwards to include a small amount of established residential land on the periphery.

Vision

• To develop the centre into a vibrant, attractive, safe and sustainable centre that offers places to live, work and relax, which attracts visitors, business, services and investment from within the City of Moonee Valley and beyond.

Strategy

• Ensure that any proposed use or development within the Keilor Road Activity Centre is generally consistent with the Keilor Road Activity Centre Structure Plan 2011.

Policy guidelines (Exercise of discretion)

• Accommodate a mixture of land uses to maximise opportunities for local employment, day and night time activity and active ground floor frontages.
• Provide new and improved pedestrian links within and through the centre.
• Encourage an increased density of development in the activity area which is respectful of the transition to residential streets adjoining the activity area.
• Encourage residential and office uses in upper levels of buildings with retail uses on the ground floor in properties fronting Keilor Road.
• Provide a consistent public domain treatment and landscaping theme for Keilor Road.
• Provide a diversity of housing sizes.
• Improve on and off-road bicycle facilities to provide better linkages to public transport and key destinations.
• Provide improved bicycle amenities throughout the activity centre; including bicycle parking, and storage areas.
• Provide well-located, accessible and safe car parking areas which do not visually dominate the public realm.
• Encourage the development of underground car parking areas where practical.
• Enhance the streetscape and provide a safe, accessible and high quality environment for pedestrians.
• Improve the movement of trains and buses through the intersection of Keilor Road and Matthews Avenue.
• Provide new and improved pedestrian links that better connect and assist safe access into and through the activity centre.
• Mitigate the impact of any new development proposals on access to and the operation of public transport, walking and cycling by encouraging an Integrated Transport Plan to be provided with any new applications.
• Support the development of a public transport interchange to facilitate convenient transfers between public transport services.
MOONEE VALLEY PLANNING SCHEME

Other Centres

Union Road and Racecourse Road
- Both these centres are identified as Activity Centres in Plan Melbourne.

Neighbourhood Centres

Neighbourhood Centres, which currently fulfil a commercial and retail role, and which also have the potential to fulfil a residential role include land at:
- Essendon Junction Neighbourhood Activity Centre
- McNamara Avenue, Airport West
- Glass Street near Glenbervie Railway Station
- Napier Street, Strathmore
- Woodland Street and Pascoe Vale Road near Strathmore Railway Station
- Buckley Street near Lincoln Road (Buckley Hollow)
- Military Road
- Milleara Road
- Centrevale

Smaller local centres also fulfill a basic convenience role to the local community.

Essendon Junction Activity Centre is identified as an Urban Renewal Precinct in Plan Melbourne and a Structure Plan is currently being developed.

Further work needs to be developed for the remainder of the centres.

Implementation

- Apply Commercial 1 Zone to principal shopping areas.
- Apply Commercial 2 Zone to commercial areas on the fringes of activity centres and peripheral sales areas.
- Apply the Activity Centre Zone to the Moonee Ponds Activity Centre.
- Apply Design and Development Overlay Schedule 3 where land is located along Mt Alexander Road to ensure future development is in accordance with the design objectives of the Mt Alexander Road Corridor Urban Design Guidelines.
- Apply Design and Development Overlay Schedule 7 to the Keilor Road Activity Centre to ensure future development is in accordance with the built form objectives.
- Apply Design and Development Overlay Schedule 10 to the North Essendon Activity Centre to ensure future development is in accordance with built form objectives.
- Apply Design and Development Overlay to implement future built form guidelines for Airport West Activity Centre, Neighbourhood Activity Centres and local centres.

Further Strategic Work

- Prepare Essendon Junction Activity Centre Structure Plan
- Prepare Union Road Activity Centre Structure Plan
- Prepare Racecourse Road Activity Centre Structure Plan
- Prepare neighbourhood and local centre structure plans and strategies

Reference Documents

- Airport West Activity Centre Structure Plan 2008
MOONEE VALLEY PLANNING SCHEME

- North Essendon Activity Centre Structure Plan 2011
- North Essendon Activity Centre Built Form Guidelines 2012
- Keilor Road Activity Centre Structure Plan 2011
- Keilor Road Built Form Guidelines 2012
- Moonee Ponds Activity Centre Structure Plan 2010 (updated 5 January 2012)
- Moonee Ponds Activity Centre Local Plan (2019)
MOONEE VALLEY PLANNING SCHEME

22.02
PUBLIC OPEN SPACE CONTRIBUTION
This policy applies to all subdivision of three lots or more.

22.02-1
Policy Basis
The Moonee Valley Planning Scheme sets out broad directions for open space planning in its MSS. Public open space is highly valued within the City of Moonee Valley and fulfills a wide range of functions. Overall, the City has a wide network of open space reserves ranging from waterway corridors, historical gardens, large sporting reserves and a network of smaller open spaces. However, open space is not equally distributed and gaps have been identified across the municipality where residents have to walk further to access open space.

The Moonee Valley Open Space Strategy identifies where there is adequate open space to meet existing resident needs and where there are deficiencies. It has also determined areas where increases in population and development will drive demand for new open space or upgrades of existing reserves.

Public open space contributions from developers are one of a number of potential resources for the acquisition of land for public open space and the improvement of existing facilities on behalf of new populations. The contribution can be either land or cash at Council’s discretion and is levied at the time land or buildings are subdivided.

Because public open space contributions can only be imposed at the subdivision stage, it is important for developers to ascertain at the site analysis stage of the development design process whether any part of the site might be required for public open space purposes where the site:
- is an area where a land contribution may be sought on Map 1; and
- fits the selection criteria for public open space in Clause 22.02-3

22.02-2
Objectives
- To implement the Moonee Valley Open Space Strategy.
- To identify when and where land contributions for public open space are preferred over cash contributions.
- To ensure that where appropriate, land suitable for public open space is set aside as part of the design of a development so that it can be transferred to or vested in Council, to satisfy the public open space contribution requirement.

22.02-3
Policy
It is policy that:

Location
Land contributions for public open space will generally be preferred over cash contributions for the purposes of Clause 52.01 of the scheme within the areas identified in Map 1, and the following sites within the Moonee Ponds Activity Centre:
- 20 Honor Street, Moonee Ponds
- 4 Everage Street, Moonee Ponds
- 13-15 Pratt Street, Moonee Ponds
- 541 Mt Alexander Road, Moonee Ponds

Land will be requested and accepted at Council’s discretion, in accordance with the open space land requirements identified in the Moonee Valley Open Space Strategy.

In all other areas of the municipality, a cash contribution equal to the amount specified in Clause 52.01 is preferred, at Council’s discretion.
In locations where a land contribution may be sought over a cash contribution, it is policy that the following criteria to be used to determine whether any part of the land in a development proposal is appropriate to be contributed as public open space at the time of the subdivision of the land or building. Land to be contributed:

- Should meet the minimum size for the site to meet its intended purpose, on its own or in combination with adjoining land. The minimum size parcels for each type of open space are as follows:
  - Regional open space, unlimited
  - Municipal open space, minimum 3 hectares
  - Neighbourhood open space, minimum 1 hectare
  - Local open space, minimum 0.25 hectares (up to 0.99 hectares)
  - Small local open space, 0.03 hectares (up to 0.25 hectares) minimum width of 10 metres wide in at least one direction
  - Small local link space, minimum 5 metres wide
- Should be accessible or have potential to be accessible
MOONEE VALLEY PLANNING SCHEME

- Should not be affected by adjoining land use in a way that diminishes the ecological, social or cultural value of the open space
- Should enhance the liveability of neighbourhoods by providing visual relief and adequate levels of sunlight
- Should be in good physical condition (e.g. free of contamination and weed infestation)
- Should contribute to habitat corridors and the protection and enhancement of biodiversity
- Should enhance any indigenous and non-indigenous heritage values
- Should contribute to the character and attractiveness of the neighbourhood
- Should take into consideration contribution to wider open space network including forming open space corridor links
- Should not be unduly restricted by services or easements
- Should be visually prominent and generally accessible by at least two access points or local roads
- Should have potential to accommodate a range of formal and informal recreational uses
- Should be close to a range of transport options such as public transport, linear shared trails and major roads

Land that does not meet all of the above criteria may still be appropriate as open space for the purposes of Clause 53A.01.

Design

In locations where this policy has identified a preference for a land contribution rather than a cash contribution, an applicant should consult the responsible authority very early in the site analysis phase of a proposal to ascertain whether any part of the land might be suitable and required for public open space purposes.

The design of a building on land where public open space will be required should accommodate the provision of public open space in a manner that meets the selection criteria for public open space.

If a contribution under Clause 53A.01 is likely to be imposed as a land contribution, and the responsible authority is satisfied that an additional part of the land which generally meets the selection criteria for public open space in Clause 22.02-3 should be acquired, the responsible authority should consult with the applicant to determine whether the development application could be modified to enable provision of the additional land to Council at Council’s cost.

Land Contributions greater than 5

Land contributions greater than 5 may be required for the subdivision of land into more than ten lots when located within the precincts where land contributions may be sought,

- Land contributions greater than 5 should have regard to:
  - The selection criteria for public open space
  - The open space type and required land size
  - The existing characteristics of the site including features to be retained
  - The intensity of the proposed development and surrounding development
  - The extent of the additional population and the anticipated demographics based on the development design
  - Recommendations for the site and surrounding area contained in the Moonee Valley Open Space Strategy
Reference Documents

*Moonee Valley Open Space Strategy 2009*


*Moonee Ponds Activity Centre: Built Form (Helyt + Co, 2019)*

*Moonee Ponds Activity Centre: Streetscapes and Public Spaces Plan (Moonee Valley City Council, 2019)*
SCHEDULE 1 TO CLAUSE 37.08 ACTIVITY CENTRE ZONE

Shown on the planning scheme map as ACZ1.

MOONEE PONDS ACTIVITY CENTRE

1.0 Moonee Ponds Framework Plan

Definitions

The following definitions apply for the purposes of interpreting this schedule:

Additional shadow means any shadow cast beyond any existing shadow cast from buildings or works, but not a shadow cast by incidental elements such as canopies, verandahs, artwork, screens or trees.

Affordable housing has the same meaning as in the Planning and Environment Act 1987.

Affordable housing uplift means floor area that exceeds the Floor Area Ratio allowable under the schedule by up to a maximum of 0.5:1.

Building height means the number of metres, excluding basements, structures associated with a roof terrace or service equipment including plant rooms, lift overruns, solar collectors, telecommunications facilities and other such equipment provided the following criteria are met:

• No more than 50 per cent of the roof area is occupied by the structures
• The structures are located in a position on the roof so as to minimise overshadowing of neighbouring properties and public spaces
• The structures do not extend higher than 3.6m above the preferred maximum building height as specified in the precinct provisions at Clause 4.2 of this Schedule
The structures are designed and screened to the satisfaction of the responsible authority.

Floor Area Ratio means the gross building area measured to the outside face of external walls and outside edge of covered balconies, including voids, divided by the area of the site in square metres. It does not include underground areas less than 1.2m above natural ground level. The area of the site includes all contiguous titles in the same ownership that form part of the proposed development.

Laneway means any road that has a boundary to boundary width less than 7m.

Street means any road that has a boundary to boundary width of 7m or more.

Street wall means that part of a building constructed within 0.3m of an existing or proposed street, lane, way or public open space.

Street wall height means a height measured from the footpath or natural surface level at the centre of the site frontage.

Unsafe wind conditions means an expected annual maximum gust wind speed exceeding 20 metres/second with a probability of exceedance of 0.1% considering all wind directions.

Comfortable wind conditions means all mean wind directions combined with a probability of exceedance less than 20% of the time, equal to or less than a wind speed of:

- 3 metres/second for sitting areas
- 4 metres/second for standing areas
- 5 metres/second for walking areas.

where the wind speed means the maximum of the:

- Hourly mean wind speed, or
- Gust equivalent mean speed (gust wind speed divided by 1.85).

2.0 Objectives to be achieved

Land use

To develop Mooree Ponds Activity Centre (MPAC) as the premier business, civic, cultural, creative, community and entertainment destination of the municipality.

To develop MPAC as an attractive centre that fosters creativity, includes attractive and functional public spaces, has a safe and accessible public transport interchange and an excellent network of cycling and walking connections.

To encourage a diverse range of housing choices and affordable housing options, including social housing.

To facilitate mixed use developments that include a range of non-residential uses on identified large sites.

Built form

To deliver a mixed-use centre with a range of built form typologies including low, medium and high-rise development.

To locate hybrid developments with a range of building typologies and scales on the one site in Precincts 2 and 3.

To deliver built form outcomes on identified large sites including the provision of public open space, affordable housing, through-block links and floor space for a range of non-residential uses.
To create a transition in scale and typology at sensitive residential interfaces, including by providing ground floor setbacks, lower street wall heights and taller forms away from sensitive residential interfaces.

To minimise overshadowing and wind impacts so as to contribute to a comfortable and safe public realm for pedestrians.

To provide a sensitive design response that does not overwhelm any existing heritage building(s).

To reduce the impact of building services on continuous active street frontages.

To create human-scale streets by ensuring street wall heights respond to street and lane widths, residential interfaces and heritage context.

To provide a continuous street wall edge rather than undercroft spaces.

To ensure building features and upper storey balconies do not protrude outside title boundaries, excluding ground floor verandas and sun/overlooking protection devices.

To encourage high-quality architecture and design in all development.

To protect valued heritage qualities of MPAC.

** Streetscapes and open space**

To encourage the creation of a variety of new public spaces.

To ensure that public spaces have adequate access to sunlight and are sheltered from wind.

To encourage a connected and well-signed network of laneways.

To activate laneways through the provision of eateries, retail and entertainment uses.

To encourage the incorporation of public art into new developments.

** Access and movement**

To prioritise the movement network to reflect the following hierarchy:

1. Pedestrians
2. Cyclists
3. Public Transport Users
4. Local Freight Movements
5. Private Motorists.

To provide legible connections for all levels of mobility to all parts of MPAC.

To encourage residents to cycle through improved street design and the provision of bicycle parking in developments.

To reduce the impact of car parking on the attractiveness and useability of the centre.

To ensure that streets are designed as safe, attractive, landscaped and pedestrian-friendly spaces.

To create an excellent network of walking and cycling connections within MPAC and to other neighbourhoods, supporting an active and healthy community.

** Environmentally Sustainable Development**

To maximise energy efficiency and water conservation in new buildings.

To reduce the impact of stormwater run-off on the drainage system by encouraging on-site stormwater infiltration.

To encourage the use of sustainable and durable building materials that require minimal maintenance.

To encourage landscape design that contributes to energy efficiency and minimises water use.
### Affordable housing

To facilitate the provision of affordable housing, including social housing, in all precincts in MPAC, including five per cent of the total number of dwellings to be developed in Precinct 9.

#### 3.0 Table of uses

<table>
<thead>
<tr>
<th>Use</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation (other than Camping and caravan park, Corrective institution, Dwelling, Dependent person’s unit and Host farm)</td>
<td>Must not be located within Sub-precinct 2D, 5A, 7E, 7G or 8H. For all other precincts, must be located above ground floor level, except for entry foyers.</td>
</tr>
<tr>
<td>Child care centre</td>
<td>Must not be located within Sub-precinct 2D, 5A, 7E, 7G or 8H.</td>
</tr>
<tr>
<td>Dependent person’s unit</td>
<td>Must be the only dependent person’s unit on the lot.</td>
</tr>
<tr>
<td>Dwelling</td>
<td>Must be located above ground floor level, except for entry foyers, unless located on the ground floor in Sub-precinct 2D, 5A, 7E, 7G, 8E, 8H or Precinct 9.</td>
</tr>
<tr>
<td>Education centre</td>
<td>Must be located within Precinct 3.</td>
</tr>
<tr>
<td>Electoral office</td>
<td>Must be used for only 4 months before an election and 2 weeks after an election.</td>
</tr>
<tr>
<td>Exhibition centre</td>
<td>Must be located within Precinct 1.</td>
</tr>
<tr>
<td>Food and drink premises (other than Hotel, Restaurant and Bar)</td>
<td>Must not be located within Precinct 1 or Sub-precinct 2D, 5A, 7E, 7G, 8E, 8H, 9A, 9B or 9C. For all other precincts, must be located on ground floor level, but is not limited to ground floor level.</td>
</tr>
<tr>
<td>Function centre</td>
<td>Must be located within Precinct 1.</td>
</tr>
<tr>
<td>Home based business</td>
<td></td>
</tr>
<tr>
<td>Informal outdoor recreation</td>
<td></td>
</tr>
<tr>
<td>Library</td>
<td>Must be located within Precinct 1.</td>
</tr>
<tr>
<td>Minor utility installation</td>
<td></td>
</tr>
<tr>
<td>Office (other than Electoral office)</td>
<td>Must not be located within Sub-precinct 2D, 5A, 7E, 7G, 8H, 9A, 9B or 9C. For all other precincts, any frontage at ground floor level must not exceed 2 metres, unless the office is a bank, real estate agency, travel agency, or other office where the floor space adjoining the frontage is a customer service area accessible to the public. Access must not be shared with a dwelling (other than a caretaker’s house).</td>
</tr>
<tr>
<td>Place of worship</td>
<td>Must be located within Precinct 1.</td>
</tr>
<tr>
<td>Railway Station</td>
<td>Must be in Precinct 2H</td>
</tr>
<tr>
<td>Use</td>
<td>Condition</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Restaurant</td>
<td>Must be located within Precinct 4 or Sub-precinct 2B, 2C, 2F, 2G, 7A, 7B, 7C, 7D, 8D, 9E, 9F, 9G or 9H.</td>
</tr>
<tr>
<td>Retail premises (other than Adult sex product shop, Food and drink premises, Gambling premises, Laundromat, Manufacturing sales, Market, Motor vehicle, boat or caravan sales, Primary produce sales, Supermarket, and Timber yard)</td>
<td>Must not be located within Precinct 1 or Sub-precinct 2D, 6A, 7E, 7G, 8A, 8B, 8D, 8E, 8G, 8H, 9A, 9B or 9C.</td>
</tr>
<tr>
<td>Supermarket</td>
<td>Must be located within Precinct 3 or Sub-precinct 2A, 2B, 2C, 2F or 2G.</td>
</tr>
<tr>
<td>Tramway</td>
<td></td>
</tr>
<tr>
<td>Any use listed in Clause 62.01</td>
<td>Must meet requirements of Clause 62.01.</td>
</tr>
</tbody>
</table>

**Section 2 - Permit required**

<table>
<thead>
<tr>
<th>Use</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult sex product shop</td>
<td>Must be at least 200 metres (measured by the shortest route reasonably accessible on foot) from a residential zone or Commercial 1 Zone, land used for a hospital, primary school or secondary school or land in a Public Acquisition Overly to be acquired for a hospital, primary school or secondary school.</td>
</tr>
<tr>
<td>Bar</td>
<td>Must not be located within Sub-precinct 2D, 5A, 7E, 7G, 8A, 8C, 8D, 8E, 8F, 8G, 9A, 9B or 9C.</td>
</tr>
<tr>
<td>Gambling premises</td>
<td>Must not be located within Sub-precinct 2D, 5A, 7E, 7G, 8A, 8C, 8D, 8E, 8F, 8G, 8H, 9A, 9B or 9C.</td>
</tr>
<tr>
<td>Hotel</td>
<td>Must not be located within Sub-precinct 2D, 5A, 7E, 7G, 8A, 8C, 8D, 8E, 8F, 8G, 8H, 9A, 9B or 9C.</td>
</tr>
<tr>
<td>Nightclub</td>
<td>Must be located within Precinct 3, Precinct 4 or Sub-precinct 2A, 2B, 2C, 2E, 2F, 2G, 7A, 7B, 7C or 7D.</td>
</tr>
<tr>
<td>Place of Assembly (other than Cinema, Drive-in theatre, Exhibition centre, Function centre, Library, Nightclub and Place of worship)</td>
<td>Must not be located within Sub-precinct 2D, 5A, 7E, 7G, 8A, 9B or 9C.</td>
</tr>
<tr>
<td>Research and development centre</td>
<td>Must not be located within Sub-precinct 2D, 5A, 7E, 7G, 8A, 9B or 9C.</td>
</tr>
<tr>
<td>Service industry (other than Dry cleaner)</td>
<td>Must not be located within Sub-precinct 2D, 5A, 7E, 7F, 8A, 8B, 8C, 8D, 8E, 8F or 8G. Must adjain or have access to a road in a Road Zone.</td>
</tr>
<tr>
<td>Service station</td>
<td>Must not be located within Sub-precinct 2D, 5A, 7E, 7F, 8A, 8B, 8C, 8D, 8E, 8F, 8G or 8H. Must adjoin, or have access to, a road in a Road Zone.</td>
</tr>
</tbody>
</table>
MOONEE VALLEY PLANNING SCHEME

<table>
<thead>
<tr>
<th>Use</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any other use not in Section 1 or 3</td>
<td></td>
</tr>
</tbody>
</table>

Section 3 – Prohibited

<table>
<thead>
<tr>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brothel</td>
</tr>
<tr>
<td>Camping and caravan park</td>
</tr>
<tr>
<td>Corrective institution</td>
</tr>
<tr>
<td>Motor racing track</td>
</tr>
<tr>
<td>Safeguard</td>
</tr>
<tr>
<td>Transport terminal (other than Railway station, Bus terminal and Heliport)</td>
</tr>
<tr>
<td>Warehouse</td>
</tr>
</tbody>
</table>

4.0 Centre-wide provisions

4.1 Use of land

A permit is not required to use land for the purpose of Local Government, providing the use is carried out by, or on behalf of, the public land manager.

4.2 Subdivision

None specified.

4.3 Buildings and works

No permit is required to construct a building or construct or carry out works for the following:

- Install an automatic teller machine.
- Alter an existing building façade provided:
  - The alteration does not include the installation of an external roller shutter
  - At least 80 per cent of the building façade at ground floor level is maintained as an entry or window with clear glazing.
- Install an awning that projects over a road if it is authorised by the relevant public land manager.
- Alter a building authorised under the Heritage Act, provided the works do not alter the existing building envelope or floor area.
- Alter or extend one dwelling on a lot. This exemption does not apply to:
  - Extension of a dwelling if it is on common property.
- Construct or extend an out-building (other than a garage or carport) on a lot, provided the gross floor area of the out-building does not exceed 10 square metres and the maximum building height is not more than three metres above ground level.

4.4 Design and development

The following design and development requirements apply to an application to construct a building or construct or carry out works in precincts 1-8.
Building height

Buildings and works in Precinct 4 must not exceed the mandatory maximum building height specified in Map 2.

Buildings and works in Precincts 1, 2, 3, 5, 6, 7, 8 should not exceed the preferred maximum building height specified in Map 2.

Where a proposal exceeds the preferred maximum building height, the applicant must demonstrate, to the satisfaction of the responsible authority, that the additional height:

- results in specific design benefits that cannot be achieved by complying with the preferred maximum building height including by:
  - the delivery of ground level public open space and through links above minimum requirements
  - site layouts that enhance internal amenity and relationships to neighbouring sites
  - the delivery of affordable housing.
- does not have an adverse impact on the streetscape, heritage values, the public realm or the amenity of adjoining properties
- meets the solar access and wind requirements of this schedule.

Floor area ratio

An application to construct a building or carry out works must not exceed the FAR specified in Map 2, unless:

- an Affordable Housing Uplift as calculated and specified in a manner agreed to by the responsible authority is provided via a cash contribution, dwellings or a combination of the two. The maximum FAR for the site can increase by up to 0.5:1, and
- the permit includes a condition (or conditions) that secures the Affordable Housing Uplift via an agreement under Section 173 of the Planning and Environment Act 1987.

Where the site includes contiguous titles in the same ownership, a Section 173 agreement must be entered into and registered on each title that records the amount of FAR developed across the entire site, and the amount (if any) of remaining FAR able to be developed on each title should it be individually redeveloped in future.

A permit cannot be granted or amended to vary this requirement, unless the permit or the permit amendment does not increase the extent of non-compliance.

Map 2 – Building Heights and Floor Area Ratios
Street wall heights

Maximum street wall heights should be in accordance with Map 3, unless the street wall height specified is higher than the preferred building height in Map 2, in which case the building height should be adopted as the maximum street wall height. The higher of the two street wall heights should be adopted on corner sites, transitioning to the lower street wall height.

Building setbacks

Unless otherwise specified, all buildings should provide a zero metre front setback from the street to the height of the street wall.

Built form above the street wall should be setback as specified in Table 1 to create a visual distinction between the facade and the upper levels, and minimise the impact of overshadowing and wind on the public realm.

Setbacks above the street wall for buildings in a Heritage Overlay should be determined on a site by site basis, with consideration of the predominant streetscape character and specific building attributes. Front setbacks in excess of the minimum preferred setbacks in Table 1 may be appropriate.

Rear and side setbacks should meet the minimum setbacks as specified in Table 1.

Rear setbacks below the street wall must meet the minimum setbacks as specified in Table 1 for sites identified in Map 4. A permit cannot be granted to vary this requirement.

Side setbacks below the street wall do not apply to light wells.

Buildings on corners at intersections should be chamfered to increase pedestrian capacity on the footpath.
Table 1 – Building setbacks

<table>
<thead>
<tr>
<th>Building height</th>
<th>Preferred minimum front building setback above street wall height</th>
<th>Preferred minimum rear and side building setback above street wall if building is not built on the boundary</th>
<th>Mandatory minimum rear building setback below street wall height for sites identified at Map 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to and including 20m</td>
<td>3m</td>
<td>4.5m</td>
<td>4.5m</td>
</tr>
<tr>
<td>Above 20m and up to and including 27m</td>
<td>5m</td>
<td>6m</td>
<td>6m</td>
</tr>
<tr>
<td>Above 27m</td>
<td>5m</td>
<td>10m</td>
<td>6m</td>
</tr>
</tbody>
</table>

Map 4 – Building Setbacks
Building separation

For all sites identified as ‘large sites’ on Map 5, separation between multiple buildings on the site should meet the requirements set out in Table 2.

Table 2 – Building separation

<table>
<thead>
<tr>
<th>Building height</th>
<th>Building separation within sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to and including 20m</td>
<td>9m</td>
</tr>
<tr>
<td>Above 20m and up to and including 27m</td>
<td>12m</td>
</tr>
<tr>
<td>Above 27m</td>
<td>20m</td>
</tr>
</tbody>
</table>

Map 5 – Large Sites
Residential interfaces

Development of sites designated Residential front interface on Map 6 should provide sensitive interfaces to low-scale residential uses by providing a minimum 3m ground floor landscaped front setback.

Development of two more dwellings on sites designated Residential rear interface 1 on Map 6 should meet the requirement of Standard B1.7 of Clause 55.4.1.

Development of sites designated Residential rear interface 2 on Map 6 should provide a low scale residential interface to residential uses by providing a street wall of 8m at the rear of the property.

Development of sites designated Residential side interface on Map 6 should provide a 8m street wall at the interface with through block links.

Map 6 - Residential Interfaces
Solar access

Built form above the street wall height must cast no additional overshadowing between 11am and 2pm on September 22 to open spaces identified with a spring equinox solar control on Map 7.

Built form above the street wall height must cast no additional overshadowing between 11am and 2pm on June 21 to open spaces identified with a winter solstice solar control on Map 7. A permit cannot be granted to vary these requirements.

Sites identified as sensitive residential interfaces on Map 7 should meet the overshadowing objective and standard B21 of Clause 55.04-5.

Map 7 - Solar Controls
Wind

This clause only applies to buildings and works with a total building height of 20m or more 
(or 15m or more on corner sites).

A permit should not be granted for buildings and works that would cause unsafe wind 
conditions or cause exceedance of comfortable wind conditions.

Access and Movement

Development should respond to the MPAC road network classification shown in Map 8. 
Development with direct access to pedestrian laneways identified in Map 8 should provide 
activation of the laneway through use or built form. Separate pedestrian and vehicular 
entries should be provided to the laneway, as appropriate.

Vehicular access to sites should be provided in accordance with the following hierarchy 
(from highest to lowest preference):

- Vehicular laneways
- Pedestrian laneways
- Local streets
- MPAC loop
- Secondary pedestrian streets
- Primary pedestrian streets
- Arterial roads

Vehicle access splays are required for:

- Sites on the corners of Pickle Lane, Hallkeeper Lane and the unnamed lane south 
of Shuter Lane (between Shuter Street and Pratt Street) should provide adequate splays 
for a 6.4m small rigid vehicle, or to the satisfaction of the responsible authority.

- Properties on the inside bend of two laneways should provide a minimum 3m x 3m 
splay, or alternative design that facilitates access by the H09 design car from 
AS2890.1-2004, to the satisfaction of the responsible authority.

Any setbacks or splays of buildings from laneways can extend over the laneway at the 
upper levels, provided a minimum 3.5m headroom clearance is maintained.

Where laneways intersect the footpaths of public streets, pedestrian visibility splays of 2m 
wide by 2.5m deep should be provided on both sides of the laneway, or to the satisfaction 
of the responsible authority. Splays are not required on the driver's side (when exiting the 
laneway) where the laneway is greater than 5m in width.
5.0 Bicycle parking

All development must provide resident bicycle parking at a minimum rate of 1 space per dwelling. Bicycle parking must be designed to meet the requirements of Clause 52.34-6 or AS2890.3-2015. A permit cannot be granted to vary this requirement.

All development must provide conveniently located office bicycle parking at a minimum rate of 1 space per 150sqm of net floor area. A permit cannot be granted to vary this requirement.

Office development should provide high quality end of trip facilities.
6.0 Precinct provisions

6.1 Precinct 1 – Civic and Community

6.1.1 Precinct map

6.1.2 Precinct objective

To establish the precinct as the principal civic, community and transportation hub for the MPAC.
**MOONEE VALLEY PLANNING SCHEME**

6.1.3 Precinct requirements

Connect the existing laneway to the east of Pascoe Vale Road.

The large site identified as IA on the Precinct Map should:

- deliver an east-west laneway to improve pedestrian access to Moonee Ponds Central and provide separation from the heritage site to the south
- provide an active interface to Mt Alexander Road, Kellaway Avenue and Pascoe Vale Road and provide off-street servicing
- respect adjacent heritage buildings by locating building mass away from sensitive interfaces
- provide a minimum FAR of 1:1 (within the overall allowed FAR) to non-accommodation uses.

6.1.4 Precinct guidelines

Support the delivery of an enhanced public transport interchange that improves pedestrian safety and amenity.

Improve pedestrian links through the precinct from the retail core to Queens Park.

Support the ongoing civic use of the Clocktower Centre incorporating services for the community, the performing arts and social and corporate activities.

Encourage new development to contribute to the civic and community role of the precinct.

Contribute to the character of the precinct by designing buildings that are ‘set in the landscape’ with opportunities for deep soil planting.
6.2 Precinct 2 – Hall and Homer

6.2-1 Precinct map

6.2-2 Precinct objective

To encourage retail, office and entertainment uses with accommodation on upper levels.

6.2-3 Precinct requirements

Reinforce Hall Street as a human scale active street by delivering small scale tenancies (nominally 5m maximum width) set within a well-designed facade.

Large sites identified as 2A, 2B and 2C on the Precinct Map should:

- deliver a ‘hybrid’ model of development that includes a mixture of building scales and typologies, including medium-scale development with carefully located towers.
Mooine Valley Planning Scheme

- provide a sensitive interface to Taylor Street by locating medium-scale development at the north of the site (23 metres) and providing a ground floor landscaped setback (minimum 3m)
- Sites 2A and 2B should deliver north-south laneways with active frontages and pedestrian priority
- Site 2C should connect Hallkeeper Lane, to be designed primarily as a vehicular laneway for rear access
- provide ground level public open space that complies with the design requirements set out in Mooine Ponds Activity Centre: Public Open Space (Mooine Valley City Council, 2019)
- provide ground floor setbacks on Hall Street, Homer Street and Eddy Street (as per the Precinct Map) to support streetscape improvements and increased pedestrian capacity
- ensure the siting and design of buildings and works avoids overshadowing of any new ground level public open space
- provide a minimum FAR of 1:1 (within the overall allowed FAR) to non-accommodation uses.

6.2.4 Precinct guidelines

Connect the precinct with Puckle Street as the principal spine of the MPAC.
Enhance Hall Street as a major movement link connecting the station with the public transport interchange.
Deliver mixed-use developments where the primary outlook is to the street.
Ensure pedestrians and street planting are prioritised by minimising crossovers on street frontages.
Provide a connective laneway network.
Minimise the impact of vehicle access and servicing on primary active streets.
Vehicle access and servicing is encouraged to rear laneways, particularly Hallkeeper Lane instead of Hall Street or Puckle Street.
6.3 Precinct 3 – Young

6.3-1 Precinct map

6.3-2 Precinct objective

To encourage the use and development of land for retail, market, educational, medical and office uses.

6.3-3 Precinct requirements

The large site identified as 3A on the Precinct Map should:

- deliver a “hybrid” model of development that includes a mixture of building scales and typologies, including medium-scale development with carefully located towers and ground floor communal open space.
provide a sensitive interface to Gladstone Street by locating medium-scale development at the south of the site (22m) and providing a ground floor landscaped setback (minimum 3m)

- reinstate Pratt Street as a human scale active street by delivering small scale tenancies (nominally 5m maximum width) set within a well-designed facade

- deliver ground level public open space that complies with the design requirements set out in *Moonee Ponds Activity Centre: Public Open Space* (Moonee Valley City Council, 2019)

- provide a minimum 3m ground floor setback along Young Street to accommodate streetscape improvements and increased pedestrian capacity

- ensure the siting and design of buildings and works avoids overshadowing of any new ground level public open space.

- provide a minimum FAR of 1:1 (within the overall allowed FAR) to non-accommodation uses.

The large site identified as 3B on the Precinct Map should:

- provide a sensitive interface to Gladstone Street by locating medium-scale development at the south of the site (22m) and providing a ground floor landscaped setback (minimum 3m)

- provide a minimum 3m ground floor setback along Young Street to accommodate increased pedestrian capacity

- provide a minimum FAR of 1:1 (within the overall allowed FAR) to non-accommodation uses.

### 6.3.4 Precinct guidelines

Enhance pedestrian movement, safety and amenity through the laneways of the precinct. Deliver medium density mixed use where the primary outlook is to the street. Encourage heritage materials such as brick and bluestone in new developments fronting St Aidans Lane and Penny Lane.

Provide active interfaces onto St Aidans Lane and Penny Lane and minimise the impact of servicing.

Ensure pedestrians and street planting are prioritised by minimising crossovers on street frontages.
6.4 Precinct 4 – Puckle – Retail Core

6.4-1 Precinct map

6.4.2 Precinct objectives

To maintain the precinct as the core retail spine for MPAC.
To maintain the heritage streetscape of Puckle Street.

6.4.3 Precinct guidelines

Reduce through-traffic movements along Puckle Street.
MOONEE VALLEY PLANNING SCHEME

Ensure that development accommodates retail, entertainment and restaurant uses at ground level, with office and residential uses above.
Deliver low scale mixed use developments where the primary outlook is to the street.
Encourage party-walling to ensure that the fine-grain character of Puckle Street is retained.
Design buildings that respond to the heritage character of Puckle Street.
Provide adequate setbacks above heritage buildings, small scale tenancies and awnings.
Ensure that buildings are designed in the round with consideration of how they are viewed when approaching Puckle Street.
Reinforce Puckle Street as a human scale active street by delivering small scale tenancies (nominally 5m maximum width).
Provide car parking and loading access via rear laneways.
6.5 Precinct 5 – Holmes

6.5-1 Precinct map

6.5-2 Precinct objective

To provide for small scale office and retail development and medium density housing.

6.5-3 Precinct requirements

Encourage sub-precinct 5A to be used for residential purposes.

Encourage development along Holmes Road and Norwood Crescent with retail uses on the ground floor.
Encourage development in sub-precinct 5B along Sydenham Street to incorporate small-scale office uses with residential uses on upper levels.

Ensure any redevelopment at 1-9 Holmes Road includes community uses, such as a recreation facility or place of assembly.

6.5.4 Precinct guidelines

Encourage the development of significant community facilities within sub-precinct 5B.

Maintain a built form scale that is respectful of adjoining residential areas.

Improve east/west connections through the precinct.

Deliver a low to mid-rise precinct with increased heights along the railway line and adequate separation between buildings including rear setbacks.

Encourage primary outlook to the street.

Provide a transition between low and mid-rise buildings by providing ground floor landscaped setbacks at sensitive residential interfaces.

Reinforce Holmes Road as a primary street by delivering ground floor active uses.

Encourage party-wall to ensure that the fine-grain character of Holmes Road is retained.

Discourage side setbacks which can inadvertently encourage consolidation.
6.6 Precinct 6 – Shuter

6.6.1 Precinct map

6.6.2 Precinct objective

To provide a focus for offices and community services, including medical suites and childcare.

6.6.3 Precinct requirements

Encourage the establishment of medical and small scale office uses within the precinct, with residential uses above.

Encourage development with residential uses at ground level along Moore Street.
MKOSKE VALLEY PLANNING SCHEME

Ensure any redevelopment at 11-25 Shutre Street provides above ground car parking or public open space with underground car parking.

6.6.4 Precinct guidelines

Encourage the integrated development of the precinct including a significant community use.

Improve pedestrian connections to and from the precinct.

Deliver ground floor active uses around the proposed Shutre Street park and contribute to safety by maximising opportunities for passive surveillance.

Deliver a mid-rise precinct with adequate separation between buildings including ground floor rear setbacks.

Encourage primary outlook to the street.

Provide a transition between low and mid-rise buildings by providing ground floor landscaped setbacks at sensitive residential interfaces.

Deliver ground level active uses along Shutre Street to contribute to its role as a primary active street with pedestrian priority.
6.7 Precinct 7 – Junction South

6.7-1 Precinct map

6.7-2 Precinct objectives

To encourage retail and entertainment uses to locate along Mt Alexander Road, with residential and office uses above.

To provide a progression of built form height, from lower scale development at the southern end of the precinct to taller built forms within the Junction.

6.7-3 Precinct requirements

Provide ground floor setbacks on Dean Street (as per the Precinct Map) to support streetscape improvements and increased pedestrian capacity.
The large site identified as 7A on the Precinct Map should:

- deliver publicly accessible ground level open space that complies with the design requirements set out in the *Moonee Ponds Activity Centre: Public Open Space* (Moonee Valley City Council, 2019)
- provide a minimum FAR of 1:1 (within the overall allowed FAR) to non-accommodation uses.

6.7.4 Precinct guidelines

Deliver a mid-rise precinct with heights increasing around the Junction.
Encourage party-walling to ensure that the fine-grain character of Mt Alexander Road is retained.
Discourage side setbacks as they can inadvertently encourage consolidation.
Provide a continuous active street wall by providing servicing via rear lanes and streets.
Provide a transition between low and mid-rise buildings by providing ground floor landscaped setbacks to sensitive residential interfaces.
Encourage sub-precincts 7E and 7G to be used for residential purposes.
6.8 Precinct 8 – Dean

6.8-1 Precinct map

6.8-2 Precinct objectives

To encourage office and residential uses including home-based businesses.
6.8-3 Precinct requirements

Provide ground floor setbacks on Alexandra Avenue and Dean Street (as per the Precinct Map) to support streetscape improvements and increased pedestrian capacity.
The large site identified as 8C on the Precinct Map should provide north-south through block links to improve pedestrian permeability and break up massing.
Sub precincts 8A, 8B, 8F and 8G should widen the rear laneway and ensure servicing is located away from the street frontage.
Large sites identified as 8A, 8B, 8C and 8D on the Precinct Map should provide a minimum FAR of 1:1 (within the overall allowed FAR) to non-accommodation uses.

6.8-4 Precinct guidelines

Deliver a low to mid-rise precinct with heights that provide an appropriate response to sensitive residential interfaces.
Provide vehicle access and servicing requirements via rear lanes, where possible.
Deliver ground level active uses along Alexandra Avenue to contribute to its role as a primary active street that connects the precinct to central Moonee Ponds.
Deliver ground level active uses along Pascoe Vale Road to contribute to its role as a primary active street.
Provide a transition between low and mid-rise buildings by providing ground floor landscaped setbacks to sensitive residential interfaces.
Reinstate existing laneways if sites are redeveloped.
Minimise overshadowing to future open space and private backyards.
6.9 Precinct 9 – Racecourse

6.9-1 Precinct map

Note: All of Precinct 9 is covered by a Heritage Overlay (HO376). The subprecinct boundaries in Precinct 9 are indicative only and are to be finalised as part of the Staging Plan required by Clause 6 of this Schedule to the satisfaction of the Responsible Authority.
6.9.2 Precinct objectives

To encourage residential, retail, commercial and employment opportunities that will enhance the role and function of MPAC and the Moonee Valley Racecourse.
To encourage a street pattern, building design and land use mix that creates opportunities for street level activation, passive surveillance of the street and changing streetscapes.
To create new and vibrant public spaces for the community.
To enable taller and more intense built form in the eastern section of the precinct which provides for a transition in height from established residential areas to the north, south and west.
To ensure a street pattern and subdivision layout which encourage walking and cycling over other modes of transport.
To ensure a high standard of building design that displays dwelling diversity, permeability, flexibility, site responsiveness and environmentally sustainability.
To encourage diversity in housing opportunities, including affordable housing options.

6.9.3 Precinct requirements

Transport Assessment and Management Plan and Integrated Transport Plan

A permit cannot be granted for use, development and/or subdivision of the whole or any part of Precinct 9 until a Transport Assessment and Management Plan and Integrated Transport Plan are prepared to the satisfaction of the responsible authority, Vic Roads and Public Transport Victoria.

The Transport Assessment and Management Plan and Integrated Transport Plan must be based on an assessment of the likely transport impacts of the proposed full development of the whole of Precinct 9, recognising the staged development potential of the site over a 15 to 20 year timeframe.

Any permit granted in Precinct 9 must be consistent with the approved Transport Assessment and Management Plan and Integrated Transport Plan.

Building height

A permit cannot be granted for buildings and works which exceed the maximum building height specified in Table 1.

<table>
<thead>
<tr>
<th>Sub-Precinct</th>
<th>Mandatory maximum building height (excluding basement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9A</td>
<td>20 metres</td>
</tr>
<tr>
<td>9C</td>
<td>11 metres</td>
</tr>
<tr>
<td>9E</td>
<td>14 metres</td>
</tr>
<tr>
<td>9H</td>
<td>32 metres</td>
</tr>
</tbody>
</table>

Discretionary building heights apply for the following sub-prefects shown in Table 2.

<table>
<thead>
<tr>
<th>Sub-Precinct</th>
<th>Discretionary building height (excluding basement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9B</td>
<td>20 metres</td>
</tr>
<tr>
<td>9D</td>
<td>32 metres</td>
</tr>
<tr>
<td>9F</td>
<td>50 metres</td>
</tr>
<tr>
<td>9G</td>
<td>32 metres</td>
</tr>
</tbody>
</table>
The preferred maximum building heights specified in Table 3 should not be exceeded.

Table 3 – Preferred Maximum Building Heights

<table>
<thead>
<tr>
<th>Sub-Precinct</th>
<th>Preferred maximum building height (excluding basement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9B</td>
<td>32 metres</td>
</tr>
<tr>
<td>9D</td>
<td>50 metres</td>
</tr>
<tr>
<td>9F</td>
<td>62 metres</td>
</tr>
<tr>
<td>9G</td>
<td>60 metres</td>
</tr>
</tbody>
</table>

6.9.4 Precinct guidelines

Built Form
The following guidelines should be met:
  • Setbacks set out in Table 4.

Table 4 - Street setbacks

<table>
<thead>
<tr>
<th>Interface (Shown on the precinct map)</th>
<th>Street setback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Front Interface (Racecourse) – Type 1</td>
<td>Minimum 3 metres to the street for buildings up to a height of 11 metres (3 storeys) from ground floor level. Building elements fronting the street above 11 metres (3 storeys) in height set back at an angle of 45 degrees (1:1) from the street wall up to the maximum building height in Table 1 at Clause 5.9.3.</td>
</tr>
<tr>
<td>Residential Front Interface (Racecourse) – Type 2</td>
<td>Minimum 3 metres to the street up to a height of 14 metres (4 storeys) from ground floor level. Building elements above 14 metres (4 storeys) set back 5 metres from the street wall up to the maximum building height in Table 1 at Clause 5.9.3.</td>
</tr>
<tr>
<td>Racecourse Interface – Type 1</td>
<td>Minimum 5 metres to the street up to the maximum building height in Table 1 at Clause 5.9.3.</td>
</tr>
</tbody>
</table>
### Interface (Shown on the precinct map) vs Street setback

| All other streets in precinct 9 | Minimum 5 metres to the street up to a height of 20 metres (6 storeys) from ground floor level. Building elements above 20 metres (6 storeys) set back 5 metres from the street wall up to the maximum building height in Table 1 at Clause 5.9.3. |

- Built form of more than 45 metres in height should be separated by a minimum of 25 metres from other buildings of more than 45 metres in height.
- Where a podium tower built form is proposed, the tower should not occupy more than 50 per cent of the podium footprint.
- Retaining walls within street setbacks should not exceed 1.2 metres in height.
- Balconies located at ground level should not exceed 1.2 metres in height from ground floor level.
- Balconies may project into the setback area, providing design excellence is demonstrated.
- Development should activate the new and existing streets and encourage passive surveillance.
- Built form should respond appropriately to sensitive interfaces in terms of scale, visual mass, overshadowing and overlooking.
- Where residential dwellings front public space at street level, the setback should be landscaped and articulated vertically and horizontally to create well designed public realm.
- Where retail uses front public space at street level, the setback may be used for outdoor seating and furniture.
- Built form should be carefully designed to maintain reasonable levels of sunlight to public spaces at the September equinox.
- Future development should be designed to carefully consider impacts on the amenity of other uses within the Precinct.
- Future development should be designed to minimise wind effects on key public realm areas.
- Car parking for residential development should be provided below ground level.

### Use

The following guidelines should be met:

- Encourage mixed use development within Sub-precincts 9D, 9E, 9F, 9G and 9H.
- Encourage predominantly residential development within Sub-precincts 9A, 9B and 9C.

### Transport/Movement

The following guidelines should be met:

- Kenes Street, and Alexandra Avenue should be extended east into the Precinct to extend the existing street based network.
- A new north-south street should be established along the eastern edge of the Precinct to create a connection between Dean Street and Thomas Street.
- Pedestrian and bicycle connections between the Moonee Ponds Creek Trail and Precinct 8 along Wilson Street and Dean Street should be improved.
- There should be no crossovers for individual dwellings fronting McPherson Street, Thomas Street and Dean Street.
Pedestrian access should allow safe and convenient access for patrons going to and from the Racecourse.

Open Space
The following guidelines should be met:

- Public open space should be designed to ensure that it:
  - Is located consistent with the Precinct Map in the form of a single park of not less than 5000 square metres and additional open spaces up to 2000 square metres (not including land set aside for road reserves, at-grade car parking areas, shared pedestrian and vehicle zones or drainage treatments).
  - Contributes to the diversity of recreation and leisure options available to the community.
  - Receives good levels of sunlight.
  - Is accessible and inviting to the wider population.
  - Accommodates gateways in the Precinct and the Racecourse entry through smaller open space areas.

Multi-purpose Community Facility
The following guidelines should be met:

- A space for a multi-purpose community facility must be provided on site to include:
  - Community meeting rooms
  - Maternal and Child Health rooms
  - Kindergarten/long day child care

Consider the opportunity to incorporate the multi-purpose community facility into any remaining heritage buildings or features of the site (e.g. Main Tote building, Stables).

Any other requirements

Agreement
Before a permit is granted for any use, development or subdivision within Precinct 9, the owner of the land must enter into an agreement to the satisfaction of the responsible authority under Section 173 of the Planning and Environment Act 1987, for the provision of:

- A public open space contribution in the form of a single park equivalent to 5000 square metres, and additional open spaces up to 2000 square metres.
- A financial contribution equivalent to the construction of two full sized AFL/Cricket playing fields, including lights and car parking.
- A financial contribution equivalent to the construction of a 500 square metre sporting pavilion.
- Contributions or delivery/upgrade on-site or off-site for physical and community infrastructure, having regard to the demand generated by the anticipated additional population within Precinct 9, including:
  - Contribution towards or provision of public art on the site. There is potential to draw upon the racing activities of the land and incorporate this with the retention of heritage features or buildings
  - Financial contributions equivalent to 30 per cent of the construction cost of a Multi-Purpose Community Facility on-site (based on a 500 square metre facility) in accordance with the approved Staging Plan specified at Clause 6.0 of this Schedule
  - Any identified transport mitigation measures and infrastructure identified in the Integrated Transport Plan
  - The timing for delivery of infrastructure at agreed trigger points which are to be based upon the release of residential lots set out in the approved Staging Plan specified at Clause 6.0 of this Schedule.
7.0 Application requirements

Buildings and Works

The following application requirements apply to an application for a permit under Clause 37.08, in addition to those specified in Clause 37.08 and elsewhere in the scheme and must accompany an application, as appropriate, to the satisfaction of the responsible authority:

- Sections of the proposed building(s).
- For a development of four or more storeys:
  - A three-dimensional representation of the proposed development within the streetscape in the context of adjacent development.
  - Streetscape elevations showing the existing streetscape, the proposed development and how the proposal sits within the elevation.
  - Information which shows the form of the proposal as oblique views from neighbouring streetscapes where any part of the proposal will be visible.
  - An ‘as completed’ representation of the development inclusive of all external services and equipment.
  - A ‘screening’ plan of all external services and equipment including on the rooftop.
- For the construction of new dwellings in buildings of four storeys or less, an assessment against the relevant provisions of Clause 54 or Clause 55.
- For the construction of a new building, an Environmentally Sustainable Design (ESD) Statement which outlines the ESD initiatives included within the proposal.
- A Pedestrian Wind Environment Assessment prepared by a suitably qualified person in accordance with the Guidelines for Planning Applicants in MPAC: Wind (Moonee Valley City Council, 2019) must accompany a planning application for:
  - Corner sites – buildings and works for developments of 15m or higher
  - All other sites – buildings and works for developments of 20m or higher
- Any other development that the responsible authority determines has the potential to create unacceptable wind impacts
- A waste management plan that meets the requirements of the Waste Management Plans – Guidelines for Planning Applicants (Moonee Valley City Council, 2019)
- An application for a permit on public land by a person other than the relevant public land manager must be accompanied by the written consent of the public land manager, indicating that the public land manager consents generally or conditionally either:
  - To the application for the permit being made
  - To the application for permit being made and to the proposed use or development
- Details, as appropriate, of any upgrading of adjacent footpaths or laneways to the standards outlined in the Moonee Ponds Activity Centre: Streetscapes and Public Spaces (Moonee Valley City Council, 2019), to the satisfaction of the responsible authority.
- Where vehicular movement in a laneway is expected to cause potential material traffic or pedestrian impact, a traffic impact assessment that demonstrates that development adjacent to a laneway can safely accommodate the anticipated increased traffic volumes.

Precinct 9

In addition to the above, an application to construct a building or construct or carry out works in Precinct 9 must be accompanied by the following information, as appropriate:

- A Staging Plan outlining:
TUESDAY, 10 DECEMBER 2019
ATTACHMENTS – ORDINARY COUNCIL MEETING
ITEM 10.5 – ATTACHMENT J

MOOKEE VALLEY PLANNING SCHEME

- The proposed stages of development
- When key components including infrastructure, roads, access ways and parks are to be provided, and how remaining precincts will be managed in the interim
- The staging of non-residential development
- The interfaces between new residential development, existing residential development and the Racecourse are addressed.

- **A Transport Assessment and Management Plan** that includes, but is not limited to:
  - The likely traffic and pedestrian generation of the proposed development taking into account the surrounding land uses
  - Results from micro-simulation modelling showing the likely traffic impacts of the proposed development on the land, the broader road network and public transport
  - Mitigation measures required to address any traffic impacts and alleviate unreasonable delays to public transport arising from the development
  - A road safety audit of the design and proposed traffic management measures and incorporating the recommendations
  - Road layouts, widths and reserves, intersection treatments and site access
  - Traffic management measures and signalisation, including proposed tram and bus priority measures
  - Movement networks within the precinct for vehicles, bicycles and pedestrians
  - The design of the footpaths, bicycle paths and shared pathways network
  - Existing and proposed public transport routes and stops near the site.

- **An Integrated Transport Plan** that includes, but is not limited to:
  - The expected demand for travel by people who will live, work or visit the site and target transport mode split to encourage walking, cycling and use of public transport by future residents
  - Existing and proposed public transport routes, stops and infrastructure (e.g. shelters, indented bays, signage, pedestrian crossings) within the site and surrounds
  - An indicative hierarchy of internal local roads proposed for the site that:
    - complements the surrounding network
    - recognises the primacy of pedestrian and bicycle access within the site
    - provides a high level of amenity and connectivity, while managing the movement of vehicles travelling on Wilson Street, Dean Street, McPherson Street and Thomas Street
    - allows for appropriate levels of manoeuvrability for emergency and service vehicles; and are of sufficient width to accommodate wide footpaths, new trees and bicycle lanes
  - The provision of a network of safe and convenient pedestrian and bicycle access ways to and through the site and connecting with public transport stops and the surrounding area, and encouraging the use of sustainable travel modes to local amenities
  - Recommended car parking and bicycle parking rates and the location and layout of on-site car and bicycle parking areas and access to and from them
  - Opportunities for providing a car share scheme
  - Provision for loading and unloading of vehicles, including waste collection and delivery vehicles, and means of access to and from them
  - Green Travel Plan initiatives, including a new resident awareness and education program
  - Opportunities for providing improved public transport services and facilities
The means proposed to address and mitigate the impacts of traffic generated by the development on the surrounding road network, including any unreasonable delays to public transport services, including:
- any required upgrades or modifications (e.g. road widening, re-allocation of road space, parking restrictions, traffic and pedestrian signals, walking and cycling infrastructure improvements, and public transport improvements)
- estimated costs of the mitigation measures
- how and when the mitigation measures should be funded and delivered
- Any interim measures that should be undertaken until such time as major transport infrastructure provision is undertaken
- Provision for continuing monitoring and review of the implementation of the plan.

**A Serviced Engineering Infrastructure Plan**, which includes:
- An assessment of the existing engineering infrastructure servicing the site and its capacity to service the proposed development
- A description of the proposed provision of all appropriate utility services to development parcels
- Preparation of a stormwater drainage master plan, including measures to ensure appropriate protection of the Moonsee Ponds Creek adjacent to the land
- The identification of the location of any on-site drainage retention facilities.

**An Environmental Sustainable Design Plan**, which demonstrates:
- The incorporation of recognised technologies and best practice where practical
- Energy conservation, with the objective of contributing to industry standards of national and international efforts to reduce energy use and greenhouse gas emissions
- Water conservation, ensuring water resources are managed in a sustainable way
- Water sensitive urban design and options ensuring the reduction of the impacts of stormwater on bays and catchments consistent with general principles as detailed in the Urban Stormwater Best Practice Environmental Management Guidelines (Melbourne Water)
- Transport planning with the aim of encouraging walking, cycling and use of public transport
- Land-use and transport planning and infrastructure provision to contribute where practical to improved air quality
- Options to reduce the amount of waste generated and encourage increased value recovery and/or recycling of waste materials
- Building materials conservation
- Sustainability options in demolition and construction practices
- Landscaping considering the provision of habitat, green spaces, and climate control as appropriate
- Indoor environmental quality and healthy internal environments.

**Stormwater and Drainage Plans** including those relating to water conservation, treatment and reuse facilities.

**A Heritage Impact Statement**, considering the recommendations of an approved Conservation Management Plan or relevant incorporated Plan, prepared to the satisfaction of the responsible authority, which addresses changes to items of heritage interest including the Club Secretary House and Garden, the S.R. Burston Stand, Alistair Clark Rose Garden and Manikato Garden, Main Tote, Horse Stalls/Birdcage and Perimeter Fence along Dean Street. The Impact Statement should outline the initiatives proposed to interpret, document or relocate (as appropriate) the built form or elements of those buildings or gardens within Precinct 9 prior to the commencement of the development that is the subject of the permit application.
Mookee Valley Planning Scheme

- A Construction Management Plan which includes, but is not limited to, the following:
  - Staging of construction
  - Management of public access and linkages around the site during construction
  - Site access, parking and traffic management
  - Any works within the road reserves of surrounding streets
  - Any impacts on public transport operations
  - Sediment control and site drainage
  - Hours of construction
  - Control of noise, dust and soiling of roadways
  - Discharge of polluted waters
  - Demolition and excavation
  - Storage of construction materials
  - Location of site offices, and cranes
  - Public safety
  - Management of potentially contaminated materials
  - Collection and disposal of building and construction waste
  - Methodology for responding to complaints associated with the construction works
  - And provide site manager contact details.

All development must be carried out in accordance with the approved Construction Management Plan to the satisfaction of the responsible authority.

8.0 Notice and review

An application to construct a building or construct or carry out works is not exempt from the notice requirements of Section 53(1)(a), (b) and (d), the decision requirements of Section 64(1), (2) and (3) and the review rights of Section 82(1) of the Act if the proposal exceeds the preferred maximum building height in Map 2 (for precincts 1-8) and Clause 6.9-3 (for precinct 9).

An application to use the land for the purposes of a Gambling premises, Hotel, Place of assembly or Bar is not exempt from the notice requirements of Section 52(1)(a), (b) and (d), the decision requirements of Section 64(1), (2) and (3) and the review rights of Section 82(1) of the Act.

9.0 Decision guidelines

The following decision guidelines apply to an application for a permit under Clause 37.08, in addition to those specified in Clause 37.08 and elsewhere in the scheme, to construct a building or construct or carry out works, which must be considered, as appropriate, by the responsible authority:

- Any advice received from the Victorian Design Review Panel (or similar), for the development of land identified as a large site at Map 4
- Whether the development contributes to the delivery of affordable housing
- Whether the proposed use is consistent with the objectives and guidelines of the precinct.

Whether new development:

- locates main entry foyers to address road frontages, with service and secondary entries away from the main frontage
- has a cumulative effect which supports a high quality of pedestrian amenity in relation to human scale and microclimate conditions within the public realm including overshadowing and mitigating wind impacts
demonstrates via a Pedestrian Environment Wind Analysis Report that both safety and comfort criteria are achieved in public areas
provides important existing and potential public spaces and streets from overshadowing
incorporates Water Sensitive Urban Design (WSUD) principles
locates primary vehicle and loading access from the local access roads, as specified in the Moonee Ponds Framework Plan at Clause 1.0
avoids podium car parking, unless it is creatively screened or sleeved by other uses
minimises the number of access points to on-site car parking from any road; provides a minimum setback to enable vehicles to drive in; and provides clearly delineated vehicle crossovers to ensure minimal disruption of the pedestrian environment and traffic flows
reflects the important horizontal and vertical patterns of local building stock through careful definition of building levels, entries, fenestration and the proportion and division of solid and transparent façade elements
incorporates active uses to the roof areas of buildings, either as open space for building users or as part of a green roof sustainability initiative
identifies opportunities for appropriately located solar panels
limits the use of non-renewable construction materials and utilises building materials that are low in embodied energy.

Whether residential development:
allows for the establishment of contained landscaped plantings on upper level terraces, decks or balconies that contribute to both the internal amenity of a dwelling and the public domain.

10.9 Signs
Sign requirements are at Clause 52.05.
All land located within Sub-precincts 2D, 5A, 7E, 7F, 7G, 8D, 8E, 8G, 8H and Precinct 9 is in Category 5. All other land is in Category 1.

11.0 Other provisions of the scheme
None specified.

12.0 Reference documents

   MPAC to 2040 – Moonee Ponds Activity Centre Local Plan (Moonee Valley City Council, 2019)
   Moonee Ponds Activity Centre: Affordable Housing (SGS Economics & Planning, 2019)
   Moonee Ponds Activity Centre: Built Form (Hoddy & Co, 2019)
   Moonee Ponds Activity Centre: Employment and Floor Space (SGS Economics and Planning, 2019)
   Moonee Ponds Activity Centre: Public Open Space (Moonee Valley City Council, 2019)
   Moonee Ponds Activity Centre: Streetscapes and Public Spaces (Moonee Valley City Council, 2019)
   Moonee Ponds Activity Centre Transport (Traffix Group, 2019)
   Moonee Ponds Activity Centre: Wind (Moonee Valley City Council, 2019)
   MY2040 Action Plan: Community Facilities (Moonee Valley City Council, 2018)
   MY2040 Strategy (Moonee Valley City Council, 2018)
   Waste Management Plans – Guidelines for Planning Applicants (Moonee Valley City Council, 2019)
SCHEDULE 2 TO THE PARKING OVERLAY

Shown on the planning scheme map as PO2.

MOONEE PONDS ACTIVITY CENTRE

1.0

Car parking objectives

To identify appropriate car parking rates for various uses in the Moonee Ponds Activity Centre.

To prioritise sustainable transport modes.

To reduce the traffic impacts of new developments within the Moonee Ponds Activity Centre.

To provide simplified parking requirements that support redevelopment and changes in use.

2.0

Permit requirement

A permit is required to provide car parking spaces in excess of the maximum number specified in this Schedule.

3.0

Number of car parking spaces required

If a use is specified in the Table below, the maximum number of car parking spaces to be provide for the use is calculated by multiplying the accompanying Rate by the accompanying Measure.

Table 1: Maximum car parking spaces

<table>
<thead>
<tr>
<th>Use</th>
<th>Maximum Rate</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dwelling</td>
<td>1</td>
<td>To each dwelling</td>
</tr>
<tr>
<td>Office</td>
<td>2</td>
<td>To each 110 sq m of net floor area</td>
</tr>
</tbody>
</table>

For all other uses listed in Table 1 of Clause 52.06-5, the maximum number of car parking spaces to be provided for the use is calculated by multiplying the Rate in Column B of that Table by the accompanying Measure.

4.0

Decision guidelines for permit applications

The following decision guidelines apply to an application for a permit under Clause 52.06-3, in addition to those specified in Clause 52.06-7 and elsewhere in the scheme. The responsible authority must consider, as appropriate:

- Whether the objectives of this schedule have been met.
- The impacts of the proposed car parking rates on creating sustainable transport patterns that preference walking, cycling and public transport use.
- The impact on the road network of providing car parking in excess of the maximum rate.
- The number and type of dwellings proposed, including the proportion of dwellings that contain three or more bedrooms.
- The impact of the proposed car parking rates on local amenity, including pedestrian amenity and the creation of a high quality public realm.
- The provision of alternative transport modes, including but not limited to car share, motorcycle and bicycle parking.
- The adaptability of above ground car parking areas to transition to other uses in future.
6.0 Financial contribution requirement

- None specified.

6.0 Requirements for a car parking plan

- None specified.

7.0 Design standards for car parking

- None specified.

8.0 Decision guidelines for car parking plans

- None specified.

9.0 Reference Document

- Moombe Ponds Activity Centre: Transport (Traffic Group, 2019).
SCHEDULE TO CLAUSE 72.03

Maps comprising part of this scheme:

- 1, 1DDO, 1DPO, 1HO, 1MAEO
- 2, 2DDO, 2DPO, 2EAO, 2EIO, 2HIO, 2LSIO, 2SBO
- 3, 3DDO, 3EAO, 3EIO, 3HIO, 3IPO, 3LSIO, 3PAO, 3SBO
- 4, 4DDO, 4HIO, 4IPO, 4LSIO, 4PAO
- 5, 5DDO, 5DPO, 5EIO, 5HIO, 5IPO, 5LSIO, 5MAEO, 5SBO
- 6, 6DDO, 6DPO, 6EIO, 6HIO, 6LSIO, 6PAO, 6SBO
- 7, 7CLPO, 7DIO, 7ESIO, 7HIO, 7NICO, 7PAO, 7SBO
- 8, 8CLPO, 8DDO, 8DPO, 8EISO, 8HIO, 8IPO, 8LSIO, 8SBO
- 9, 9DDO, 9ESIO, 9HIO, 9IPO, 9LSIO, 9MAEO
- 10, 10DDO, 10ESIO, 10HIO, 10IPO, 10LSIO, 10PAO, 10SBO
- 11, 11DDO, 11DPO, 11HIO, 11ESIO, 11HIO, 11IPO, 11LSIO, 11PAO, 11SBO
- 12, 12DDO, 12EAO, 12EIO, 12HIO, 12IPO, 12LSIO, 12NICO, 12PAO, 12SBO
- 13, 13CLPO, 13DDO, 13HIO, 13IPO, 13LSIO, 13NICO, 13PAO
- 14, 14DDO, 14DPO, 14ESIO, 14HIO, 14IPO, 14LSIO, 14PAO, 14SBO
- 15, 15DDO, 15EAO, 15EIO, 15HIO, 15IPO, 15NICO, 15SBO
- 16, 16CLPO, 16DDO, 16DPO, 16EAO, 16ESIO, 16HIO, 16IPO, 16LSIO
## MOONEE VALLEY PLANNING SCHEME

### SCHEDULE TO CLAUSE 72.08 BACKGROUND DOCUMENTS

**Background documents**

<table>
<thead>
<tr>
<th>Name of background document</th>
<th>Amendment number - clause reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>None specified MPAC to 2040: Moonee Ponds Activity Centre Local Plan (Moonee Valley City Council, 2019)</td>
<td>C207/moon Clause 02 and Schedule to Clause 37.08</td>
</tr>
<tr>
<td>Moonee Ponds Activity Centre: Built Form (I-List) + Co. 2019</td>
<td>C207/moon Clause 02 and Schedule to Clause 37.08</td>
</tr>
<tr>
<td>Moonee Ponds Activity Centre: Streetscapes and Public Spaces (Moonee Valley City Council, 2019)</td>
<td>C207/moon Clause 02 and Schedule to Clause 37.08</td>
</tr>
<tr>
<td>Moonee Ponds Activity Centre: Public Open Spaces (Moonee Valley City Council, 2019)</td>
<td>C207/moon Clause 02 and Schedule to Clause 37.08</td>
</tr>
<tr>
<td>Moonee Ponds Activity Centre: Transport (Traffic Group, 2018)</td>
<td>C207/moon Schedule to Clause 37.08 and 46.08</td>
</tr>
<tr>
<td>Moonee Ponds Activity Centre: Employment and Floor Space (SGS Economics and Planning, 2019)</td>
<td>C207/moon Schedule to Clause 37.09</td>
</tr>
<tr>
<td>Moonee Ponds Activity Centre: Affordable Housing (SGS Economics and Planning, 2019)</td>
<td>C207/moon Schedule to Clause 37.09</td>
</tr>
<tr>
<td>Moonee Ponds Activity Centre: Wind (Moonee Valley City Council, 2019)</td>
<td>C207/moon Schedule to Clause 37.08</td>
</tr>
<tr>
<td>Waste Management Plans – Guidelines for Planning Applicants (Moonee Valley City Council, 2019)</td>
<td>C207/moon Schedule to Clause 37.08</td>
</tr>
</tbody>
</table>
MOONEE VALLEY PLANNING SCHEME

AMENDMENT C207moon

EXPLANATORY REPORT

Who is the planning authority?

The Amendment has been prepared by the Moonee Valley City Council, which is the planning authority for the Amendment.

Land affected by the Amendment

The Amendment applies to all land within the Moonee Ponds Major Activity Centre as identified in the MPAC to 2040: Moonee Ponds Activity Centre Local Plan (2019).

What the Amendment does

The Amendment proposes to implement the land use and development directions of the MPAC to 2040: Moonee Ponds Activity Centre Local Plan (2019) and associated background documents.

Specifically, the Amendment proposes to:

Municipal Planning Strategy

1. Replace content in the Municipal Planning Strategy at Clause 02.03-1 (Settlement) relating to the Moonee Ponds Activity Centre.

Planning Policy Framework

2. Replace local policy content in the Planning Policy Framework at Clause 15 (Built Environment and Heritage) relating to urban design.
3. Replace local policy content in the Planning Policy Framework at Clause 19 (Infrastructure) relating to open space.
Zones

4. Replace the Schedule to Clause 37.08 (Activity Centre Zone) with a new schedule that applies to the Moonee Ponds Activity Centre.

Overlays

5. Introduce a new Schedule to Clause 45.09 (Parking Overlay) with a new schedule that introduces maximum parking rates for all uses in the Moonee Ponds Activity Centre.

Operational Provisions

6. Amend Schedule to Clause 72.03 (What Does this Planning Scheme Consist of?) to introduce a new map relating to the Moonee Ponds Activity Centre.

7. Replace the Schedule to Clause 72.06 (Background Documents) to include a list of new background documents used to update the Municipal Planning Strategy, local policies in the Planning Policy Framework, Schedule to Clause 37.08 (Activity Centre Zone) and Schedule to Clause 45.09 (Parking Overlay). The new documents are as follows:

a. MPAC to 2040: Moonee Ponds Activity Centre Local Plan (Moonee Valley City Council, 2019)

b. Moonee Ponds Activity Centre: Built Form (Hodyl + Co Pty Ltd, 2019)

c. Moonee Ponds Activity Centre: Streetscapes and Public Spaces (Moonee Valley City Council, 2019)

d. Moonee Ponds Activity Centre: Public Open Spaces (Moonee Valley City Council, 2019)

e. Moonee Ponds Activity Centre: Transport (Traffic Group, 2019)


g. Moonee Ponds Activity Centre: Affordable Housing (SGS Economics and Planning, 2019)

h. Moonee Ponds Activity Centre: Wind (Moonee Valley City Council, 2019)

i. Waste Management Plans – Guidelines for Planning Applicant (Moonee Valley City Council, 2019)

Strategic assessment of the Amendment

Why is the Amendment required?

The Amendment is required to implement the land use and development directions of the MPAC to 2040: Moonee Ponds Activity Centre Local Plan (2019) (Local Plan) and associated background documents in the Moonee Ponds Activity Centre. The Amendment will provide the activity centre with a contemporary land use and development framework that reflects the vision and strategic intent set by the MV2040 Strategy, Council’s long-term plan for a healthy Moonee Valley.

Moonee Ponds Activity Centre is identified as Major Activity Centre in Plan Melbourne 2017-2050: Metropolitan Planning Strategy (2017).

The Activity Centre Zone (ACZ) applying to the Moonee Ponds Activity Centre was introduced to the Moonee Valley Planning Scheme via Amendment C100 on 30 March 2015. Amendment C100 gave effect to the objectives and strategies contained within the Moonee Ponds Activity Centre Structure Plan (2010) (updated 2012). On 30 March 2015, Amendment C155 also applied the ACZ to the Moonee Valley Racecourse under Section 20(4) of the Planning and Environment Act 1987. The Moonee Valley Racecourse development proposal was previously subject to the Moonee Valley Racecourse Redevelopment Advisory Committee (Advisory Committee) established in November 2012 to hear all relevant matters associated with the proposed redevelopment of the Moonee Valley Racecourse. The recommendations of the Advisory Committee were introduced to the Moonee Valley Planning Scheme on 25 September 2014 via Amendment C120.

Activity Centre Pilot Program
In recent years there has been an increase in the scale of development proposed and approved in the Moonee Ponds Activity Centre. The subsequent built form outcomes have not aligned with the objectives of the Moonee Ponds Activity Centre Structure Plan (2010) (updated 2012) and did not meet the community expectation for the area.

In December 2016, the Moonee Ponds Activity Centre was announced as one of the pilot locations in the State Government’s Activity Centre Pilot Program (Pilot Program). A key purpose of the Pilot Program was to identify how planning controls could be used to provide greater clarity and certainty about development heights in activity centres, and to ensure the community have a clearer understanding of the form of new development expected in the activity centres.

On 12 October 2017, Amendment C183 introduced mandatory maximum building height controls for the Moonee Ponds Activity Centre (Precincts 1 – 8) on an interim basis until 20 September 2018. During this period, Council commenced a comprehensive review of the Moonee Ponds Activity Centre that considered built form, transport, streetscapes, open space, employment and floor space, affordable housing and wind. On 27 September 2018, Amendment C187moon extended the expiry date of the interim controls to 30 September 2019 with DELWP noting that an extension was required to allow for the significant strategic work to be completed. On 20 September 2019, Amendment C206moon further extended the interim controls until 30 September 2020 to allow sufficient time to progress a full planning scheme amendment for permanent controls.

MPAC to 2040: Moonee Ponds Activity Centre Local Plan

The Local Plan has been developed in line with Moonee Valley City Council’s long-term plan, MV2040 Strategy. The Local Plan summarises the key directions from the following documents:

- Moonee Ponds Activity Centre: Built Form
- Moonee Ponds Activity Centre: Streetscapes and Public Spaces
- Moonee Ponds Activity Centre: Public Open Spaces
- Moonee Ponds Activity Centre: Transport
- Moonee Ponds Activity Centre: Employment and Floor Space
- Moonee Ponds Activity Centre: Affordable Housing
- Moonee Ponds Activity Centre: Wind
- MV2040 Action Plan: Community Facilities (Moonee Valley City Council, 2016)
- Waste Management Plans – Guidelines for Planning Applicant (Moonee Valley City Council, 2019)

The Local Plan provides a tailored response for the Moonee Ponds Activity Centre to ensure forecast growth occurs in a way that successfully balances the valued attributes of the activity centre and delivers a high-quality living and working environment.

The Amendment proposes to implement the following key controls:

<table>
<thead>
<tr>
<th>Control</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandatory Floor Area Ratios (FARs)</td>
<td>Ensures new development provides a contextual response to the site considering the overall vision for the activity centre and the specific precinct objectives. The FARs will enable more site responsive design to be delivered, rather than a typical ‘podium and tower’ typology across the centre.</td>
</tr>
<tr>
<td>Discretionary maximum building heights</td>
<td>The FARs are applied with a discretionary building height (metres) to provide guidance of the expected typology and scale of new development.</td>
</tr>
<tr>
<td>Mandatory maximum building height – Precinct 4: Puckle Street Retail Core</td>
<td>Applies only to Puckle Street and is consistent with Planning Practice Note: S9: Role of Mandatory Provisions in Planning Schemes due to Puckle Street’s high heritage value.</td>
</tr>
<tr>
<td>Discretionary side and rear setbacks and building separation</td>
<td>Improves internal and public amenity for new development and maximises development equity.</td>
</tr>
<tr>
<td>------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Mandatory rear setbacks – certain locations</td>
<td>Applies only to rear to rear boundary locations and is required where there is no laneway to separate sites.</td>
</tr>
<tr>
<td>Discretionary street wall heights and building setbacks (above the street wall)</td>
<td>Provides a contextual response that relates to street widths, sensitive residential interfaces and heritage buildings.</td>
</tr>
<tr>
<td>Mandatory and discretionary solar access controls</td>
<td>Protects key pedestrian streets and public open space from overshadowing, and effectively limits building heights on some sites.</td>
</tr>
<tr>
<td>Affordable housing uplift</td>
<td>Facilitating the delivery of much needed affordable housing in the municipality, the controls enable development to exceed the mandatory FAR by a maximum of 0.5:1 where provision is made for affordable housing (either by cash or dwellings).</td>
</tr>
<tr>
<td>Discretionary residential interfaces and ground floor setbacks</td>
<td>Provides sensitive interfaces to low scale residential uses on the activity centre boundary, reduces visual bulk from the street level, and facilitates an improved public realm.</td>
</tr>
<tr>
<td>Discretionary wind assessments</td>
<td>Ensures new development minimises negative wind impacts for pedestrian comfort and safety at the street level.</td>
</tr>
<tr>
<td>Mandatory minimum bicycle parking rates</td>
<td>Supports the objective to improve cycling accessibility and encourage a modal shift to sustainable transport modes.</td>
</tr>
<tr>
<td>Mandatory maximum car parking rates</td>
<td>Leverages the activity centre’s proximity to various public transport options and Melbourne CBD, and reduces reliance on vehicle and support alternative modes of transport.</td>
</tr>
</tbody>
</table>

The suite of controls proposed will provide greater clarity and certainty to the Moonee Valley community regarding the development outcomes in the Moonee Ponds Activity Centre.

The Amendment proposes no change to the specific controls for Precinct 9 – Racecourse.

**How does the Amendment implement the objectives of planning in Victoria?**

The amendment implements the following objectives of planning in Victoria, set out in section 4(1) of the Planning and Environment Act 1997, in particular:

(a) To provide for the fair, orderly, economic and suitable use, and development of the land.

(b) To ensure a pleasant, efficient and safe working, living and recreational environment for all Victorians and visitors to Victoria.

(c) To facilitate development in accordance with the objectives of planning in Victoria.

The Amendment will provide for the orderly use and development in the Moonee Ponds Activity Centre consistent with these objectives.

**How does the Amendment address any environmental, social and economic effects?**

**Environmental**

The Amendment is expected to have positive environmental impacts by:

- Guiding growth to locations where existing infrastructure can be leveraged resulting in a lower environmental impact.
- Enhancing the urban forest and increasing greening initiatives.
- Encouraging waste avoidance, reuse and recycling.
- Integrating biodiversity and sustainability into decision making.
- Facilitating sustainable transport alternatives such as walking and cycling, and encouraging public transport usage.

Social and Economic

The Amendment is expected to have a positive social and economic impact for the municipality by:

- Providing the community with greater certainty and clarity of controls in the Moonee Ponds Activity Centre.
- Providing the framework for decision making, which Council will use to strategically accommodate growth in activity centre.
- Enhancing commercial and community opportunities in the activity centre.
- Improving the quality of built form, the attractiveness of streetscapes and overall safety and amenity in the public realm.
- Seeking to provide more affordable housing options.

Does the Amendment address relevant bushfire risk?

The land affected by the Amendment is not located within an area of identified bushfire risk.

Does the Amendment comply with the requirements of any Minister’s Direction applicable to the amendment?

The Amendment is consistent with the Ministerial Direction on the Form and Content of Planning Schemes under Section 7(5), Ministerial Direction No. 9 Metropolitan Planning Strategy made under Section 12(2) and Ministerial Direction No. 11 Strategic Assessment of Amendment made under Section 12(2)(a) of the Planning and Environment Act 1987.

How does the Amendment support or implement the Planning Policy Framework and any adopted State policy?

The Amendment supports the Planning Policy Framework in the following ways:

- Clause 11 (Settlement) by providing a suite of control to appropriately respond to the needs of existing and future communities, and to facilitate sustainable development.
- Clause 15 (Built Environment and Heritage) by encouraging development and urban environments that are safe, healthy and attractive.
- Clause 16 (Housing) by providing for housing diversity and housing affordability, and ensuring the efficient provision of supporting infrastructure.
- Clause 17 (Economic Development) by ensuring the activity centre has opportunities for local employment, and commercial growth and viability.
- Clause 18 (Transport) by facilitating higher density development close to established public transport nodes, and providing access to social and economic opportunities.

How does the Amendment support or implement the Municipal Planning Strategy?

The Amendment supports the Municipal Planning Strategy in the following ways:

- Clause 02.02 (Vision) by introducing land use and built form controls that assist in achieving a healthy Moonee Valley that is fair, thriving, connected, green and beautiful.
- Clause 02.03-1 (Settlement) and in particular, the strategic directions supporting the Moonee Ponds Activity Centre as the primary activity centre in Moonee Valley, enhancing amenity
through the provision of quality green spaces and urban design treatments, and accommodating higher density apartments.

Does the Amendment make proper use of the Victoria Planning Provisions?

The Amendment makes proper use of the appropriate zoning and overlay tools available under the Victoria Planning Provisions to achieve the strategic objectives of the Moonee Valley Planning Scheme.

The Amendment has been prepared in accordance with Planning Practice Note 58: Structure Planning for Activity Centres, Planning Practice Note 59: Role of Mandatory Provisions in Planning Schemes and Planning Practice Note 60: Height and Setback Controls for Activity Centres.

How does the Amendment address the views of any relevant agency?

The views of relevant agencies were considered in the development of the Local Plan (which guides the preparation of the Amendment). The agencies include the Department of Transport and VicTrack.

All relevant agencies and stakeholders will be consulted during the public exhibition period for the Amendment.

Does the Amendment address relevant requirements of the Transport Integration Act 2010?

The Amendment carefully considers transport access and movement for the activity centre, which includes walking, cycling, private vehicle, freight and public transport connections. The Amendment will not have a significant impact on the transport system of on the Transport Integration Act 2010.

Resource and administrative costs

What impact will the new planning provisions have on the resource and administrative costs of the responsible authority?

The Amendment is not expected to impose additional resource or administrative costs on the responsible authority. The Amendment will provide a clear framework that will provide a greater certainty and clarity to the community and other stakeholder regarding the land use and development in the Moonee Ponds Activity Centre.

Where you may inspect this Amendment

The amendment is available for public inspection, free of charge, during office hours at the following places:

Moonee Valley City Council
9 Kallaway Avenue
Moonee Ponds VIC 3039

The Amendment can also be inspected free of charge at the Department of Environment, Land, Water and Planning website at www.planning.vic.gov.au/public-inspection.

Submissions

Any person who may be affected by the amendment may make a submission to the planning authority. Submissions about the Amendment must be received by 28 February 2020.

A submission must be sent to:

Strategic Planning Department
Moonee Valley City Council
PO Box 126
Moonee Ponds VIC 3039
Panel hearing dates

In accordance with clause 4(2) of Ministerial Direction No.15 the following panel hearing dates have been set for this amendment:

- directions hearing: Week commencing 15 June 2020
- panel hearing: Week commencing 27 July 2020

Email: strategicplanning@mvcc.vic.gov.au
Planning and Environment Act 1987

MOONEE VALLEY PLANNING SCHEME

AMENDMENT C207moon

INSTRUCTION SHEET

The planning authority for this amendment is the Moonee Valley City Council.

The Moonee Valley Planning Scheme is amended as follows:

Planning Scheme Maps

The Planning Scheme Maps are amended by a total of 1 attached map sheet.

Overlay Maps

1. Insert new Planning Scheme Map No. 12PO in the manner shown on the attached map marked "Moonee Valley Planning Scheme, Amendment C207moon.

Planning Scheme Ordinance

The Planning Scheme Ordinance is amended as follows:

2. In Purpose and Vision – replace Clause 02.03 with a new Clause 02.03 in the form of the attached document.

3. In Planning Policy Framework – replace Clause 15.01-1L with a new Clause 15.01-1L in the form of the attached document.


5. In Zones – Clause 37.08, replace Schedule 1 with a new Schedule 1 in the form of the attached document.

6. In Overlays – Clause 45.09, insert a new Schedule 2 in the form of the attached document.

7. In Operational Provisions – Clause 72.03, replace the Schedule with a new Schedule in the form of the attached document.

8. In Operational Provisions – Clause 72.08, replace the Schedule with a new Schedule in the form of the attached document.

End of document
Moores Valley Planning Scheme

02.03

STRATEGIC DIRECTIONS

Settlement

Activity centres

Moores Valley has six major activity centres identified in Plan Melbourne being Moores Ponds, Airport West, Essendon North, Niddrie-Kellor Road, Union Road and Racecourse Road.

Moores Ponds Major Activity Centre

Moores Ponds Major Activity Centre is the primary activity centre in Moores Valley and plays an important role as a regional centre in Melbourne’s north-west. The centre should be supported by:

- Reinforcing the activity centre as a destination for retail, business, civic, cultural, creative and entertainment uses.
- Encouraging higher-density development that respects the local heritage attributes of the area.
- Designing new development to be sensitive to the surrounding residential areas, particularly where they directly interface.
- Encouraging the activation of the laneway network, including through greening initiatives and public art, connecting to Lytton Place and Little Racecourse Road.
- Connecting and activating laneways to create a cohesive network for improved pedestrian permeability and viability.
- Supporting sustainable transport modes by providing high quality bicycle and walking infrastructure and reducing the reliance on the private vehicle.

Airport West Major Activity Centre

Airport West Major Activity Centre provides a varied commercial function and is a key employment hub for the municipality. The centre should be supported by:

- Maintaining the retail focus of the area.
- Developing the centre as a significant employment hub.
- Consolidating retail, commercial, community, entertainment, recreational and residential uses in the northern precinct.
- Supporting the McNamara Avenue precinct to provide local convenience retailing.
- Improving the northern gateway with distinctive architecture.

North Essendon Major Activity Centre

North Essendon Major Activity Centre serves the local area and provides a complementary role to the larger retail catchments of the Airport West and Niddrie-Kellor Road Major Activity Centres. The traditional built form and "local village" character of the centre is highly valued. The centre should be supported by:

- Maintaining the "local village" character of the centre.
- Enhancing the strong sense of identity by respecting the heritage attributes of the commercial streetscape.
Niddrie-Kelms Road Major Activity Centre

Niddrie-Kelms Road Major Activity Centre is a well-established strip centre providing a local retail focus consolidated in the core retail area. Along Kelms Road there are clearly identifiable land use precincts providing the centre with a vibrant atmosphere both day and night. The centre should be supported by:
- Facilitating the night time economy.

Union Road Major Activity Centre

Union Road Major Activity Centre plays an important local role in providing a range of retail, commercial and community services. The centre should be supported by:
- Encouraging the activation of laneways and pedestrian amenity improvements.
- Designing development to respect the heritage values of the commercial buildings.

Racecourse Road Major Activity Centre

Racecourse Road Major Activity Centre maintains a ‘main street’ feel and is evolving with more retail uses and increased levels of higher-density development. The centre should be supported by:
- Leveraging the benefits of investment brought by the nearby Arden-Macaulay and Flemington racecourse revitalisation to reinforce the role of the centre as a diverse local cultural and social hub.
- Encouraging new development that respects the local heritage attributes of the site.

Neighbourhood and local centres

Neighbourhood centres that currently fulfil a commercial and retail role and that have the potential to fulfil a residential role include:
- Essendon Junction Neighbourhood Activity Centre
- McNamaras Avenue, Airport West
- Glass Street near Glenroyville Railway Station
- Napier Street, Strathmore
- Woodland Street and Pascoe Vale Road near Strathmore Railway Station
- Buckley Street near Lincoln Road (Buckley Hollow)
- Military Road
- Millearn Road
- Centenary

This residential role will be in the form of:
- Higher-density mixed use development, including shop-top housing.
- Smaller local centres also fulfill a basic convenience role for the local community.

Local Places

Aberfeldie

The Aberfeldie neighbourhood is bounded by Buckley Street in the north and the Maribyrnong River in the south. While it is predominantly residential in nature, Aberfeldie has substantial open space areas mainly adjoining the Maribyrnong River. These open space areas are a focus for community, sporting and recreational activities. Aberfeldie should be supported by:
Reinforcing the neighbourhood as the focus of the Maribyrnong River by capitalising on its natural environment, high-quality built form and public spaces.

Enhancing the neighbourhood’s role as the focus for community, sporting and recreational facilities.

Establishing the Maribyrnong River Cultural Precinct as the principal arts and cultural precinct of the municipality.

Encouraging development and urban design to respond to the green character of the neighbourhood.

Growth in Aberfeldie is forecast to be relatively moderate compared to other areas of Moonee Valley. By 2040 Aberfeldie is expected to accommodate an increased number of families with young children and young adults. New housing should:

- Be in the form of medium-density infill development.
- Provide a diversity of housing sizes and more accessible dwellings.

**Airport West**

The Airport West neighbourhood is a key economic and employment area with access to freeways and rail corridors at its periphery. The Airport West industrial precinct occupies the eastern portion of the neighbourhood. At the northern gateway into the municipality, the Airport West shopping centre marks the entrance to Moonee Valley, providing higher-order retailing for the neighbourhood and surrounding areas. Airport West should be supported by:

- Capitalising on the neighbourhood’s strategic location adjacent the Essendon Fields Airport by encouraging physical and economic connections.

Growth in Airport West is forecast to be relatively moderate compared to other areas of Moonee Valley. By 2040 Airport West is expected to accommodate an increased number of empty nesters, mature families, older lone persons and persons in care accommodation. New housing should:

- Include medium-density infill development with pockets of higher-density development in areas where there is good access to services and facilities.
- Provide more accessible and smaller dwellings.
- Provide specialised accommodation such as aged care.

**Ascot Vale**

The focus of the Ascot Vale neighbourhood is the Union Road Major Activity Centre. The neighbourhood is bordered by the Maribyrnong River to the west and has open spaces throughout. The neighbourhood is well serviced by public transport, particularly in the east. Housing types in the area include Victorian-era dwellings and contemporary infill within the Ascot Chase precinct. Ascot Vale should be supported by:

- Strengthening the Maribyrnong River corridor by connecting the river to parks and sporting facilities at Fairbairn Park.

By 2040 Ascot Vale is expected to accommodate an increased number of families with young children and young professional couples. A significant proportion of the forecast growth for Ascot Vale should:

- Be accommodated within the redeveloped Ascot Vale housing estate in a way that does not distinguish between types of tenure.

Most of the remaining growth should:

- Be accommodated through higher-density development close to public transport, including tram corridors and major road corridors.

**Avondale Heights**

The Avondale Heights neighbourhood occupies an elevated bluff in a hook of the Maribyrnong River with views to the east and west. Military Road runs through the centre of the neighbourhood providing its economic focus. Avondale Heights has two distinct
subdivision patterns, a street grid pattern in the southern areas in and around Canning Street and late 20th century curvilinear street patterns further north and east. Avondale Heights should be supported by:

- Facilitating the role of Military Road as a convenient local shopping strip and focus of economic activity.
- Providing a consistent boulevard treatment along Military Road to accommodate a potential future transport corridor.

The neighbourhood is proximate to the Maribyrnong Defence site. This significant urban renewal precinct provides opportunities to:

- Connect the Maribyrnong Defence site with Avondale Heights via Military Road and maximise opportunities for cross-river connections.

Growth in Avondale Heights is forecast to be relatively moderate compared to other areas of Moonee Valley. By 2040, Avondale Heights is expected to accommodate an increased number of empty nesters and older home owners. New housing should:

- Be in the form of medium-density infill development across the neighbourhood.
- Provide more accessible and smaller dwellings.

Essendon

The Essendon neighbourhood is focussed around the Essendon Junction Neighbourhood Activity Centre. Essendon Junction is the cultural, entertainment and transport hub of the neighbourhood. The Windy Hill precinct with its variety of sporting clubs is a defining element of Essendon’s character, along with the many schools in the neighbourhood. The neighbourhood exhibits a rich architectural history reflected in large areas of heritage recognition. Essendon should be supported by:

- Maintaining the cultural and entertainment focus of Essendon Junction.
- Encouraging development to feature high-quality architecture and design that complements the heritage qualities of the neighbourhood.
- Encouraging development in Essendon Junction to complement and enhance the visual appearance of Mt Alexander Road.
- Accommodating mixed use development around the train station that is well integrated with the public realm.

Essendon is forecast to undergo significant population growth in the period to 2040. By 2040, Essendon is expected to accommodate an increased number of young families and older families. New housing should:

- Be in the form of higher-density, apartment-type development along transport corridors and main roads.
- Otherwise, be in the form of medium-density infill development.
- Provide a range of dwelling types and densities as part of major urban renewal expected on underutilised land at Essendon Station.

Flemington

The Flemington neighbourhood is the gateway to Moonee Valley from the south. Economic activity is largely centred along Racecourse Road with the range of businesses reflecting the diverse cultures residing in the neighbourhood. Delbys Park is a well-used open space area. Victorian era laneways are characteristic of the neighbourhood. Flemington should be supported by:

- Promoting high-quality architecture and design that integrates well with the heritage attributes of the neighbourhood and the inclusive identity of Racecourse Road.
- Promoting Delbys Park’s function as the primary open space in the area through the provision of social, physical and open space facilities.
By 2040 Flemington is expected to accommodate an increased number of families with young children and young professional couples. Approximately 29 per cent of the forecast growth for Flemington is expected to:

- Be accommodated in the redeveloped Flemington housing estate in a way that does not distinguish between types of tenure.

Most of the remaining growth should:

- Be accommodated in higher-density development along tram corridors and major roads, particularly Burwood Road and Mt Alexander Road corridors.

**Keilor East**

In Keilor East, Millieara Road forms a prominent spine through the neighbourhood. While the neighbourhood has good vehicular access, pedestrian and cycling access needs to be improved. Keilor East should be supported by:

- Providing pedestrian and cycling connections through the neighbourhood, including between Valley Lake, East Keilor Leisure Centre and the Centreway.
- Providing a consistent boulevard treatment along Millieara Road to accommodate a potential future transport corridor.

Growth in Keilor East is forecast to be relatively moderate compared to other areas of Moonee Valley. By 2040 Keilor East is expected to accommodate an increased number of empty nesters and older lone persons. New housing should:

- Be primarily in the form of medium-density infill development.
- Provide more specialised accommodation such as retirement living and aged care to cater for the forecast increase in older residents.

**Keilor Road/Essendon North**

Keilor Road/Essendon North is a linear neighbourhood linking the eastern parts of the municipality to the western region. The village character of Essendon North is emphasised by the low scale built form and numerous parks including Woodlands Park, Cliff Atkinson Reserve and Lincoln Park. At the western end of the neighbourhood in Niddrie, there is a diversity of shopping and community opportunities. Keilor Road/Essendon North should be supported by:

- Designing development to respect the character of Steele Creek and the adjacent green spaces.

The Keilor Road/Essendon North neighbourhood is forecast to undergo significant growth in the period to 2040. By 2040 Keilor Road/Essendon North is expected to accommodate an increased number of empty nesters, mature families, older lone persons and persons in care accommodation. New housing should:

- Be in the form of higher-density, apartment-type development along Keilor Road and Mt Alexander Road.
- Provide specialised accommodation options, such as retirement living or aged care to cater for the expected increase in older residents.

**Milleara**

At the heart of the Milleara neighbourhood is the Milleara shopping precinct which sits at the junction of Milleara Road and Buckley Street. The street pattern in Milleara is well connected to a series of curvilinear boulevards in the garden suburb style. Milleara should be supported by:

- Reinforcing Milleara Road as the local retail precinct.
- Strengthening Buckley Street as a habitat corridor and gateway to the west through landscaping and urban design measures, and generous front setbacks to new buildings.
Moonee Ponds

The Moonee Ponds neighbourhood is defined by the Moonee Ponds Major Activity Centre and encompasses extensive heritage precincts and high amenity streetscapes. A range of pedestrian, cycling and open space infrastructure upgrades are required to cater for the needs of residents. Moonee Ponds should be supported by:

- Improving walking and cycling connections to link the Moonee Ponds Major Activity Centre to the Moonee Valley racecourse and key transport nodes.
- Improving pedestrian permeability throughout the neighbourhood.
- Enhancing amenity through the provision of quality green spaces and urban design treatments.
- Protecting and enhancing views from Moonee Ponds to Brunswick, particular views of Queens Park, Mt Alexander Road and from Ascot Vale Road.

Moonee Ponds is forecast to undergo significant growth in the period to 2040 and is expected to accommodate an increased number of young families and older families. A large proportion of the growth should:

- Be accommodated in the Moonee Ponds Major Activity Centre and the redeveloped Moonee Valley racecourse in the form of higher-density apartments.
- Outside of these two growth locations, new housing should:
  - Be developed in a variety of ways, including medium-density infill development with pockets of higher-density development along Mt Alexander Road.

Niddrie/Essendon West

The Niddrie/Essendon West neighbourhood is a predominantly residential area based on a permeable grid street network. Buckley Street provides the primary commercial edge with smaller neighbourhood centres located on Hampton Road and Hoffmans Road. There are dispersed open space assets including Buckley Park. Niddrie/Essendon West should be supported by:

- Enhancing Buckley Park’s importance as a community and recreational space through the provision of a community hub.
- Connecting the Steele Creek corridor to the open space network through urban design and landscaping measures.

Growth in Niddrie/Essendon West is forecast to be relatively moderate compared to many other areas of Moonee Valley. By 2040 Niddrie/Essendon West is expected to accommodate an increased number of empty nesters, mature families, older lone persons and persons in care accommodation. New housing should:

- Be in the form of medium density infill development with pockets of higher-density development along Buckley Street and Hoffmans Road.

Strathmore

The Strathmore neighbourhood streets are laid out in a traditional grid pattern that responds to the topography. The Napier Street neighbourhood centre provides a diversity of local retailing and services in a charming strip shopping environment. The Woodland
Street Parkes Vale Road economic and activity area is centred on the Strathmore Station and is well-positioned to undergo significant urban renewal in the coming years. Strathmore should be supported by:

- Maintaining the local retailing uses in the Napier Street neighbourhood centre.
- Growth in Strathmore is forecast to be relatively moderate compared to some other areas of Moonee Valley. By 2040 Strathmore is expected to accommodate an increased number of families with young children and young adults. New housing should:
  - Be in the form of medium-density infill development with pockets of high-density development in the vicinity of Strathmore Station and the Napier Street shopping area.

**Strathmore Heights**

Strathmore Heights is a linear neighbourhood to the north of the Tullamarine Freeway-City Link, which is separated from the rest of the municipality by Rosamond Fields Airport. It contains a substantial network of public open spaces. Strathmore Heights should be supported by:

- Strengthening the neighbourhood's substantial network of public open space through connections to Moonee Ponds Creek.
- Encouraging recreational and sporting uses at the neighbourhood’s reserves.
- Growth in Strathmore Heights is forecast to be limited compared to other areas of Moonee Valley. By 2040 Strathmore Heights is expected to accommodate an increased number of families with young children and some young adults. New housing should:
  - Be in the form of infill development.

**02.03.2 Environmental and landscape values**

**Vegetation**

Despite being highly urbanised, Moonee Valley is home to unique remnant vegetation, including nationally significant Temperate Grassland sites, particularly along its creek corridors. Less than 10% hectares of remnant vegetation is left in the municipality on both public and private land. Council supports:

- Preserving, connecting and enhancing these spaces and their ecological value, including the habitat of the nationally significant species it hosts.
- Enhancing the municipality’s urban forest by increasing tree canopy cover.

**Maribyrnong River and creek corridors**

Moonee Valley is located in the Maribyrnong River catchment and has a series of rivers and creeks traversing the municipality. These waterways, which include the Moonee Ponds Creek, Steele Creek and Five Mile Creek, contain significant remnant vegetation, function as habitat corridors and link major parks and open spaces. The Maribyrnong River is an important gateway and edge to the city. Council supports:

- Conserving, repairing and enhancing the natural attributes of the three distinct catchment lengths along the Maribyrnong River and located within the municipality. They are Steele Creek (including river), Maribyrnong (suburban river) and Racecourse (river flats).
- Designing development to be sensitive to all river and creek interfaces.
- Expanding and enhancing the open space corridors along the Moonee Ponds and Steele Creek waterways and improving links as opportunities arise.

**02.03.3 Environmental risks and amenity**

**Floodplains**
Appropriate land use planning controls are important to protecting existing natural and capital assets in the municipality. Council supports:

- Mitigating impacts of flooding and improving existing infrastructure to cater for increasing levels of urbanisation.

**Discretionary uses in residential zones**

Residential areas often require complementary discretionary uses for the convenience of local residents. Council supports:

- Protecting the function, amenity and character of residential areas by considering the location, design, traffic effects and amenity impacts of proposed discretionary uses.

**Licensed premises**

Licensed premises can play a beneficial role in the economy of the municipality. Council supports:

- Managing activities associated with licensed premises to minimise impacts on residential amenity.

### Built environment and heritage

**Signs**

The expectation for residential areas is for a high level of amenity with minimal intrusion from business use and signage. Some industrial areas, freeways and declared main roads offer limited opportunities for illuminated and promotional high wall and sky signs. Council supports:

- Promoting a co-ordinated approach to signage in terms of common themes, colours and building identification.
- Encouraging signs that add vitality and colour to commercial areas, including major promotion signs that complement the character of the area.

**Neighbourhood character**

Monaro Valley’s residential neighbourhoods include a number of areas identified specifically for their highly consistent and valued character. Council supports:

- Encouraging careful design responses such as architectural styles, dwelling setbacks, pattern of built form, building materials and landscaping to maintain valued character.

**Environmentally sustainable development**

Council is committed to improving the sustainability of the built environment. Development is encouraged to be designed to incorporate environmentally sustainable design. Council supports:

- Planning neighbourhoods to reduce car travel and designing more environmentally sustainable buildings that reduce energy and water use, along with reducing waste and pollution.
- Incorporating environmentally sustainable design elements at the time of planning approval to assist in achieving environmentally sustainable development. This approach seeks to:
  - Improve outcomes that may otherwise be compromised if these matters are only considered as part of building approval.
  - Reduce difficulties or extra costs associated with retrofitting the development.
Heritage

Moonee Valley has extensive areas and numerous individual places of heritage significance and the protection and conservation of these heritage assets is required. Council supports:
- Protecting places of heritage significance.
- Allowing adaptive reuse and change of buildings where they provide for the retention and maintenance of a heritage place.

02.03.5 Housing

It is important that Moonee Valley accommodates people of all ages and backgrounds who require different housing options which change at various stages of life. Moonee Valley’s 13 neighbourhoods will be able to accommodate varying degrees of new housing growth depending on a range of factors, including good access to public transport, services, open space and retail opportunities. Council supports:
- Encouraging a range of housing types that can influence tenures and price points, and quality social and public housing.
- Directing housing growth of higher scale to key locations where people can access most of their everyday needs within a 20-minute walk, cycle or local public transport trip of their home.
- Protecting the city’s significant heritage areas from inappropriate development.
- Maintaining the lower built form scale of residential neighbourhoods where it is the prevailing character and there is limited access to services and amenities.

02.03.6 Economic development

Retail is the highest employer in the municipality (as at 2016), accounting for 16.3 per cent of all jobs in Moonee Valley. Retail is followed by health care and social assistance (11.5 per cent) with education and training at 10.5 per cent. The accommodation and food services industry saw the greatest increase in jobs between the 2011 and 2016 Censuses (increase of 680 jobs).

Essendon Fields Airport

Essendon Fields Airport offers significant economic growth and employment opportunities for the city due to its size and strategic location. Currently Essendon Fields Airport contributes almost $634 million per annum to the local economy and is the employment home for 6,000 people. Essendon Fields Airport is projected to generate 18,000 new jobs and an estimated $900 million in investment over the next decade. The precinct contains several vacant and underused land parcels suitable for aviation, retail, commercial and industrial development. Council supports:
- Facilitating the continued growth and development of Essendon Fields Airport as an employment and economic hub.

Diversified economy

Analysis shows the municipality currently underperforms in the provision of localised employment, with 76 per cent of its residents working outside Moonee Valley. However, by 2040 it is estimated there will be an additional 29,000 jobs in Moonee Valley. Economic changes are also transforming work practices, such as through flexible work arrangements, and in 2040 many residents will spend more time working away from their primary place of work. Council seeks to support these trends by:
- Facilitating the local employment sector to encourage a more sustainable local economy.
Establishing a network of co-working spaces to strengthen connections to
neighbourhoods.

Commercial
The traditional role of activity centres as places mainly for commercial activity is changing,
and activity centres are now also becoming entertainment hubs. Council seeks to support
this change by:
• Encouraging a mix of uses that allow activity centres to be viable while meeting
the needs of the local community
• Encouraging both day and night activation.

Construction has taken over from manufacturing as the highest output industry in the local
economy, now generating 15.2 per cent of the city’s total output (KPMG, Output by
Industry, 2017). Traditional industrial precincts in Airport West and Essendon Fields Airport
are evolving into diversified employment hubs that include a range of non-traditional
industrial land uses. Council supports:
• Improving the appearance of and access to existing industrial precincts to
encourage further investment in the municipality and encourage employment
growth.

Transport
Sustainable transport
To achieve a city with a network of 20-minute neighbourhoods, sustainable transport access
and provision needs to be planned and delivered as a priority across the municipality.

Monash Valley’s road network accommodates many different transport modes. As these are
significantly impact on one another, the most efficient modes should be encouraged. Council
supports:
• Delivering sustainable transport options and facilitating access to these in order to
support a network of 20-minute neighbourhoods.
• Establishing a road space hierarchy based on modal efficiency in the following
order:
  - Pedestrians
  - Cyclists
  - Public transport
  - Freight
  - Private vehicles including autonomous vehicles and/or shared rides
• Modifying road infrastructure to accommodate future vehicle technologies.
Where that involves reducing road reserves, using that opportunity to change the
land use of these reserves to public open space.

Essendon Fields Airport
Essendon Fields Airport is an important feature of the municipality as a valuable provider of
regional transport, through air transport services, as well as a significant generator of
employment opportunities. Council supports:
• Encouraging the safe and effective operation of the Airport
• Ensuring land use and development is compatible with the operation of the
Airport, having regard to the appropriate master plan.
• Mitigating amenity impacts to residents.

Infrastructure
Major educational uses
Educational institutions can contribute to the wellbeing of the community. Many educational institutions have long-term associations with the local area and their expansion is generally in response to community needs. Council supports:

- Promoting the orderly planning of institutional uses to help minimise off-site impacts and ensure the safe movement of pedestrians, cyclists and vehicles, providing certainty for the institution and residential area.

Community facilities

In a climate of rapid population growth and technological changes, community facilities need to be adaptable to meet the changing needs of the community to achieve a healthy city of 20-minute neighbourhoods. Council supports:

- Providing an accessible network of community hubs to encourage the co-location of a diverse range of infrastructure and services.
- Transforming existing community facilities into multi-purpose facilities.

Open space

Well-located open spaces are an important element in achieving a healthy city, particularly as the population increases. Moonee Valley has a wide network of open space reserves ranging from waterway corridors, historical gardens, large sporting reserves and a network of smaller open spaces. Council supports:

- Preserving, managing and maintaining open space areas for health, safety, recreation, drainage, aesthetic and ecological reasons.
- Increasing open space in the municipality by reducing gaps in the network.
- Delivering open space connected to walking and cycling paths, drainage and key ecological links.

Integrated water management

Achieving improved stormwater quality is key in reducing the environmental impact of urban development on waterways and receiving water bodies in the Moonee Valley catchment. Council supports:

- Incorporating stormwater treatment measures into the design of development, including wetlands, rain gardens, systems and porous pavements to filter pollutants, to help protect and improve the condition of the natural waterways and passively irrigate urban vegetation.

Waste management

As Moonee Valley experiences higher-density development, waste management planning is becoming increasingly important. Effective waste management is particularly important for multi-unit developments to minimise impacts on residential amenity, pedestrian traffic and public health. Council supports:

- Encouraging waste management systems that reduce waste generation and promote innovations in the design of waste management systems.
Urban design

Strategies

Provide built form that integrates with the public realm through:

- Providing active frontages.
- Minimising loss of solar access.
- Minimising negative wind effects.
- Designing buildings to have a human scale at the street edge.

Encourage the design of buildings, subdivisions, car parks and public open spaces that maximise passive surveillance and personal safety.

Reduce the visual prominence of car parking and vehicular access.

Strengthen the appearance of boulevards by providing:

- A coherent built form edge.
- Continuous separated cycling network.
- Landscaping.
- Improved accessibility to public transport.

Discourage development on land adjacent to major boulevards, such as Mt Alexander Road, that would detract from the visual appearance of the boulevard.

Emphasise municipal gateways through the design of public spaces, art/sculpture, or built form that reinforces their context and landscape.

Design publicly accessible spaces to foster social interaction and gatherings.

Design buildings around parks, river corridors and open spaces to respect the natural environment and maximise passive surveillance.

Design development to be sensitive to all river and creek interfaces.

Minimise visual clutter in streets and public spaces.

Encourage the provision of public art in new development.

Create and enhance visual and physical links to adjoining streets, public transport and/or key community facilities when developing large or consolidated sites.

Encourage developments up to but not exceeding preferred heights. In cases where a development seeks to exceed preferred maximum building heights it should clearly demonstrate a net community benefit (this does not apply to the Moonee Ponds Activity Centre).

Design new development to reduce the impact of wind to ensure the safety and comfort of pedestrians.

Ensure new development does not cast additional overshadowing on key pedestrian streets and public open spaces.
15.01-1L Signs

Strategies

Encourage business directory signs with multiple occupants/uses in industrial areas.

Discourage internally illuminated pole signs except where the building is set back from the street frontage and for uses such as petrol filling stations and car sales.

Encourage pole signs to be set back from the street frontage and to complement the scale of buildings on the land.

Encourage signs attached to buildings to complement the scale of the building and not project above the building or obscure any architectural features.

Design promotion and major promotion signs along or near freeways or on main roads so they form an architectural feature.
Open space

Strategy

Provide a diversity of open spaces that incorporate day and night activity.

Objective

To identify where land contributions for public open space are preferred over financial contributions.

Strategy

Request land contributions for public open space over cash contributions in parts of Airport West, Niddrie, Essendon North, Essendon, Moonee Ponds, Ascot Vale, Newmarket and Flemington as shown in the map, to address gaps in the open space network.

Request land contributions on the following sites within the Moonee Ponds Activity Centre:

- 20 Homer Street, Moonee Ponds
- 4 Eversley Street, Moonee Ponds
- 13-15 Pratt Street, Moonee Ponds
- 541 Mt Alexander Road, Moonee Ponds

Give preference to financial contributions for all other open space contributions.
Policy documents

Consider as relevant:

- *Moonee Ponds Activity Centre: Built Form* (Hodes & Co. 2019)
- *Moonee Ponds Activity Centre: Streetscapes and Public Spaces* (Moonee Valley City Council, 2019)
MOONEE VALLEY PLANNING SCHEME

SCHEDULE 1 TO CLAUSE 37.08 ACTIVITY CENTRE ZONE

Shown on the planning scheme map as ACZ1.

MOONEE PONDS ACTIVITY CENTRE

1.0 Moonee Ponds Framework Plan

Definitions

The following definitions apply for the purposes of interpreting this schedule:

Additional shadow means any shadow cast beyond any existing shadow cast from buildings or works, but not a shadow cast by incidental elements such as canopies, verandahs, artwork, screens or trees.

Affordable housing has the same meaning as in the Planning and Environment Act 1997.

Affordable housing uplift means floor area that exceeds the Floor Area Ratio allowable under the schedule by up to a maximum of 0.5:1.

Building height means the number of metres, excluding basements, structures associated with a roof terrace or service equipment including plant rooms, lift overruns, solar collectors, telecommunications facilities and other such equipment provided the following criteria are met:

- No more than 50 per cent of the roof area is occupied by the structures
- The structures are located in a position on the roof so as to minimise overshadowing of neighbouring properties and public spaces
- The structures do not extend higher than 3.6m above the preferred maximum building height as specified in the precinct provisions at Clause 4.2 of this Schedule.
The structures are designed and screened to the satisfaction of the responsible authority.

Floor Area Ratio means the gross building area measured to the outside face of external walls and outside edge of covered balconies, including voids, divided by the area of the site in square metres. It does not include underground areas less than 1.2m above natural ground level. The area of the site includes all contiguous titles in the same ownership that form part of the proposed development.

Laneway means any road that has a boundary to boundary width less than 7m.

Street means any road that has a boundary to boundary width of 7m or more.

Street wall means that part of a building constructed within 0.3m of an existing or proposed street, laneway or public open space.

Street wall height means a height measured from the footpath or natural surface level at the centre of the site frontage.

Unsafe wind conditions means an expected annual maximum gust wind speed exceeding 20 metres/second with a probability of exceedance of 0.1% considering all wind directions.

Comfortable wind conditions means all mean wind directions combined with a probability of exceedance less than 20% of the time, equal to or less than a wind speed of:

- 3 metres/second for sitting areas
- 4 metres/second for standing areas
- 5 metres/second for walking areas.

where the wind speed means the maximum of the:

- Hourly mean wind speed, or
- Gust equivalent mean speed (gust wind speed divided by 1.85).

2.0 Objectives to be achieved

Land use

To develop Moonee Ponds Activity Centre (MPAC) as the premier business, civic, cultural, creative, community and entertainment destination of the municipality.

To develop MPAC as an attractive centre that fosters creativity, includes attractive and functional public spaces, has a safe and accessible public transport interchange and an excellent network of cycling and walking connections.

To encourage a diverse range of housing choices and affordable housing options, including social housing.

To facilitate mixed use developments that include a range of non-residential uses on identified large sites.

Built form

To deliver a mixed-use centre with a range of built form typologies including low, medium and high-rise development.

To locate hybrid developments with a range of building typologies and scales on the one site in Precincts 2 and 3.

To deliver built form outcomes on identified large sites including the provision of public open space, affordable housing, through-block links and floorspace for a range of non-residential uses.
To create a transition in scale and typology at sensitive residential interfaces, including by providing ground floor setbacks, lower street wall heights and taller forms away from sensitive residential interfaces.

To minimise overshadowing and wind impacts so as to contribute to a comfortable and safe public realm for pedestrians.

To provide a sensitive design response that does not overwhelm any existing heritage building(s).

To reduce the impact of building services on continuous active street frontages.

To create human-scale streets by ensuring street wall heights respond to street and lane widths, residential interfaces and heritage context.

To provide a continuous street wall edge rather than undercroft spaces.

To ensure building features and upper storey balconies do not protrude outside title boundaries, excluding ground floor verandahs and sun/overlooking protection devices.

To encourage high-quality architecture and design in all development.

To protect valued heritage qualities of MPAC.

**Streetscapes and open space**

To encourage the creation of a variety of new public spaces.

To ensure that public spaces have adequate access to sunlight and are sheltered from wind.

To encourage a connected and well-signed network of laneways.

To activate laneways through the provision of eateries, retail and entertainment uses.

To encourage the incorporation of public art into new developments.

**Access and movement**

To prioritise the movement network to reflect the following hierarchy:

1. Pedestrians
2. Cyclists
3. Public Transport Users
4. Local Freight Movements
5. Private Motorists.

To provide legible connections for all levels of mobility to all parts of MPAC.

To encourage residents to cycle through improved street design and the provision of bicycle parking in developments.

To reduce the impact of car parking on the attractiveness and useability of the centre.

To ensure that streets are designed as safe, attractive, landscaped and pedestrian-friendly spaces.

To create an excellent network of walking and cycling connections within MPAC and to other neighbourhoods, supporting an active and healthy community.

**Environmentally Sustainable Development**

To maximise energy efficiency and water conservation in new buildings.

To reduce the impact of stormwater run-off on the drainage system by encouraging on-site stormwater infiltration.

To encourage the use of sustainable and durable building materials that require minimal maintenance.

To encourage landscape design that contributes to energy efficiency and minimises water use.

*MOOREE VALLEY PLANNING SCHEME*

ZONE – CLAUSE 37.08 - SCHEDULE 1

PAGE 3 OF 40
Affordable housing
To facilitate the provision of affordable housing, including social housing, in all precincts in MPAC, including five per cent of the total number of dwellings to be developed in Precinct 9.

3.0 Table of uses

Section 1 - Permit not required

<table>
<thead>
<tr>
<th>Use</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation (other than Camping and caravan park, Corrective institution, Dwelling, Dependent person’s unit and Host farm)</td>
<td>Must not be located within Sub-preinct 2D, 5A, 7A, 7G or 9H. For all other precincts, must be located above ground floor level, except for entry foyers.</td>
</tr>
<tr>
<td>Child care centre</td>
<td>Must not be located within Sub-preinct 2D, 5A, 7A, 7G or 9H.</td>
</tr>
<tr>
<td>Dependent person’s unit</td>
<td>Must be the only dependent person’s unit on the lot.</td>
</tr>
<tr>
<td>Dwelling</td>
<td>Must be located above ground floor level, except for entry foyers, unless located on land in Sub-preinct 2D, 5A, 7A, 7G, 9A, 9B or 9C.</td>
</tr>
<tr>
<td>Education centre</td>
<td>Must be located within Precinct 3.</td>
</tr>
<tr>
<td>Electoral office</td>
<td>Must be used for only 4 months before an election and 2 weeks after an election.</td>
</tr>
<tr>
<td>Exhibition centre</td>
<td>Must be located within Precinct 1.</td>
</tr>
<tr>
<td>Food and drink premises (other than Hotel, Restaurant and Bar)</td>
<td>Must not be located within Precinct 1 or Sub-preinct 2D, 5A, 7A, 7G, 9A, 9B or 9C. For all other precincts, must be located on ground floor level, but is not limited to ground floor level.</td>
</tr>
<tr>
<td>Function centre</td>
<td>Must be located within Precinct 1.</td>
</tr>
<tr>
<td>Home based business</td>
<td></td>
</tr>
<tr>
<td>Informal outdoor recreation</td>
<td></td>
</tr>
<tr>
<td>Library</td>
<td>Must be located within Precinct 1.</td>
</tr>
<tr>
<td>Minor utility installation</td>
<td></td>
</tr>
<tr>
<td>Office (other than Electoral office)</td>
<td>Must not be located within Sub-preinct 2D, 5A, 7A, 7G, 9A, 9B or 9C. For all other precincts, any frontage at ground floor level must not exceed 2 metres, unless the office is a bank, real estate agency, travel agency, or other office where the floor space adjoining the frontage is a customer service area accessible to the public. Access must not be shared with a dwelling (other than a caretaker’s house).</td>
</tr>
<tr>
<td>Place of worship</td>
<td>Must be located within Precinct 1.</td>
</tr>
<tr>
<td>Railway Station</td>
<td>Must be in Precinct 2H.</td>
</tr>
</tbody>
</table>
### Mooroo Valley Planning Scheme

<table>
<thead>
<tr>
<th>Use</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restaurant</td>
<td>Must be located within Precinct 4 or Sub-precinct 2B, 2C, 2F, 2G, 7A, 7B, 7C, 7D, 8D, 8E, 8F, 8G, 8H, 9A, 9B or 9C.</td>
</tr>
<tr>
<td>Retail premises (other than Adult sex product shop, Food and drink premises, Gambling premises, Laundromat, Manufacturing sales, Market, Motor vehicle, boat or caravan sales, Primary produce sales, Supermarket, and Timber yard)</td>
<td>Must not be located within Precinct 1 or Sub-precinct 2D, 5A, 7E, 7G, 8A, 8B, 8D, 8E, 8G, 8H, 9A, 9B or 9C.</td>
</tr>
<tr>
<td>Supermarket</td>
<td>Must be located within Precinct 3 or Sub-precinct 2A, 2B, 2C, 2E, 2F or 2G.</td>
</tr>
<tr>
<td>Tramway</td>
<td>Any use listed in Clause 62.01 Must meet requirements of Clause 62.01.</td>
</tr>
</tbody>
</table>

### Section 2 - Permit required

<table>
<thead>
<tr>
<th>Use</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult sex product shop</td>
<td>Must be at least 200 metres (measured by the shortest route reasonably accessible on foot) from a residential zone or Commercial 1 Zone, land used for a hospital, primary school or secondary school or land in a Public Acquisition Overlay to be acquired for a hospital, primary school or secondary school.</td>
</tr>
<tr>
<td>Bar</td>
<td>Must not be located within Sub-precinct 2D, 5A, 7E, 7G, 8A, 8C, 8D, 8E, 8F, 8G, 8H, 9A, 9B or 9C.</td>
</tr>
<tr>
<td>Gambling premises</td>
<td>Must not be located within Sub-precinct 2D, 5A, 7E, 7G, 8A, 8C, 8D, 8E, 8F, 8G, 8H or Precinct 9.</td>
</tr>
<tr>
<td>Hotel</td>
<td>Must not be located within Sub-precinct 2D, 5A, 7E, 7G, 8A, 8C, 8D, 8E, 8F, 8G, 8H, 9A, 9B or 9C.</td>
</tr>
<tr>
<td>Nightclub</td>
<td>Must be located within Precinct 3, Precinct 4 or Sub-precinct 2A, 2B, 2C, 2E, 2F, 2G, 7A, 7B, 7C or 7D.</td>
</tr>
<tr>
<td>Place of Assembly (other than Cinema, Drive-in theatre, Exhibition centre, Function centre, Library, Nightclub and Place of worship)</td>
<td>Must not be located within Sub-precinct 2D, 5A, 7E, 7G, 8H, 9A, 9B or 9C.</td>
</tr>
<tr>
<td>Research and development centre</td>
<td>Must not be located within Sub-precinct 2D, 5A, 7E, 7G, 8H, 9A, 9B or 9C.</td>
</tr>
<tr>
<td>Service industry (other than Dry cleaner)</td>
<td>Must not be located within Sub-precinct 2D, 5A, 7E, 7F, 8A, 8C, 8D, 8E, 8F or 8G. Must adjoin or have access to a road in a Road Zone.</td>
</tr>
<tr>
<td>Service station</td>
<td>Must not be located within Sub-precinct 2D, 5A, 7E, 7F, 8A, 8C, 8D, 8E, 8F, 8G or 8H. Must adjoin, or have access to, a road in a Road Zone.</td>
</tr>
</tbody>
</table>
**MOONIE VALLEY PLANNING SCHEME**

<table>
<thead>
<tr>
<th>Use</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any other use not in Section 1 or 3</td>
<td></td>
</tr>
</tbody>
</table>

**Section 3 – Prohibited**

- Brothel
- Camping and caravan park
- Corrective institution
- Motor racing track
- Saleyard
- Transport terminal (other than Railway station, Bus terminal and Heliport)
- Warehouse

### 4.0 Centre-wide provisions

### 4.1 Use of land

A permit is not required to use land for the purpose of Local Government, providing the use is carried out by, or on behalf of, the public land manager.

### 4.2 Subdivision

None specified.

### 4.3 Buildings and works

No permit is required to construct a building or construct or carry out works for the following:

- Install an automatic teller machine.
- Alter an existing building façade provided:
  - The alteration does not include the installation of an external roller shutter
  - At least 90 per cent of the building façade at ground floor level is maintained as an entry or window with clear glazing.
- Install an awning that projects over a road if it is authorised by the relevant public land manager.
- Alter a building authorised under the Heritage Act, provided the works do not alter the existing building envelope or floor area.
- Alter or extend one dwelling on a lot. This exemption does not apply to:
  - Extension of a dwelling if it is on common property.
- Construct or extend an out-building (other than a garage or carport) on a lot, provided the gross floor area of the out-building does not exceed 10 square metres and the maximum building height is not more than three metres above ground level.

### 4.4 Design and development

The following design and development requirements apply to an application to construct a building or construct or carry out works in precincts 1-8.
Building height

Buildings and works in Precinct 4 must not exceed the mandatory maximum building height specified in Map 2.

Buildings and works in Precincts 1, 2, 3, 5, 6, 7, 8 should not exceed the preferred maximum building height specified in Map 2.

Where a proposal exceeds the preferred maximum building height, the applicant must demonstrate, to the satisfaction of the responsible authority, that the additional height:

- results in specific design benefits that cannot be achieved by complying with the preferred maximum building height including by:
  - the delivery of ground level public open space and through links above minimum requirements
  - site layouts that enhance internal amenity and relationships to neighbouring sites
  - the delivery of affordable housing.
- does not have an adverse impact on the streetscape, heritage values, the public realm or the amenity of adjoining properties.
- meets the solar access and wind requirements of this schedule.

Floor area ratio

An application to construct a building or carry out works must not exceed the FAR specified in Map 2, unless:

- an Affordable Housing Uplift as calculated and specified in a manner agreed to by the responsible authority is provided via a cash contribution, dwellings or a combination of the two. The maximum FAR for the site can increase by up to 0.5:1, and
- the permit includes a condition (or conditions) that secures the Affordable Housing Uplift via an agreement under Section 173 of the Planning and Environment Act 1987.

Where the site includes contiguous titles in the same ownership, a Section 173 agreement must be entered into and registered on each title that records the amount of FAR developed across the entire site, and the amount (if any) of remaining FAR able to be developed on each title should it be individually redeveloped in future.

A permit cannot be granted or amended to vary this requirement, unless the permit or the permit amendment does not increase the extent of non-compliance.

Map 2 – Building Heights and Floor Area Ratios
Street wall heights

Maximum street wall heights should be in accordance with Map 3, unless the street wall height specified is higher than the preferred building height in Map 3, in which case the building height should be adopted as the maximum street wall height. The higher of the two street wall heights should be adopted on corner sites, transitioning to the lower street wall height.

Map 3- Street Wall Heights

Building setbacks

Unless otherwise specified, all buildings should provide a zero metre front setback from the street to the height of the street wall.

Built form above the street wall should be setback as specified in Table 1 to create a visual distinction between the facade and the upper levels, and minimise the impact of overshadowing and wind on the public realm.

Setbacks above the street wall for buildings on a corner may adopt front setbacks for each street interface.

Setbacks above the street wall for buildings in a Heritage Overlay should be determined on a site by site basis, with consideration of the predominant streetscape character and specific building attributes. Front setbacks in excess of the minimum preferred setbacks in Table 1 may be appropriate.

Rear and side setbacks should meet the minimum setbacks as specified in Table 1.

Rear setbacks below the street wall must meet the minimum setbacks as specified in Table 1 for sites identified in Map 4. A permit cannot be granted to vary this requirement.

Side setbacks below the street wall do not apply to light wells.

Buildings on corners at intersections should be chamfered to increase pedestrian capacity on the footpath.
**Table 1 – Building setbacks**

<table>
<thead>
<tr>
<th>Building height</th>
<th>Preferred minimum front building setback</th>
<th>Preferred minimum rear and side building setback above street wall if building is not built on the boundary</th>
<th>Mandatory minimum rear building setback below street wall height for sites identified at Map 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to and including 20m</td>
<td>3m</td>
<td>4.5m</td>
<td>4.5m</td>
</tr>
<tr>
<td>Above 20m and up to and including 27m</td>
<td>5m</td>
<td>6m</td>
<td>6m</td>
</tr>
<tr>
<td>Above 27m</td>
<td>5m</td>
<td>10m</td>
<td>6m</td>
</tr>
</tbody>
</table>

**Map 4 – Building Setbacks**
Building separation

For all sites identified as ‘large sites’ on Map 5, separation between multiple buildings on the site should meet the requirements set out in Table 2.

<table>
<thead>
<tr>
<th>Building height</th>
<th>Building separation within sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to and Including 20m</td>
<td>9m</td>
</tr>
<tr>
<td>Above 20m and up to and including 27m</td>
<td>12m</td>
</tr>
<tr>
<td>Above 27m</td>
<td>20m</td>
</tr>
</tbody>
</table>

Map 5 - Large Sites
Residential interfaces

Development of sites designated Residential front interface on Map 6 should provide sensitive interfaces to low-scale residential uses by providing a minimum 3m ground floor landscaped front setback.

Development of two more dwellings on sites designated Residential rear interface 1 on Map 6 should meet the requirement of Standard B17 of Clause 55.4.1.

Development of sites designated Residential rear interface 2 on Map 6 should provide a low scale residential interface to residential uses by providing a street wall of 8m at the rear of the property.

Development of sites designated Residential side interface on Map 6 should provide a 8m street wall at the interface with through block links.

Map 6 - Residential Interfaces
Solar access

Built form above the street wall height must cast no additional overshadowing between 11am and 2pm on September 22 to open spaces identified with a spring equinox solar control on Map 7.

Built form above the street wall height must cast no additional overshadowing between 11am and 2pm on June 21 to open spaces identified with a winter solstice solar control on Map 7. A permit cannot be granted to vary these requirements.

Sites identified as sensitive residential interfaces on Map 7 should meet the overshadowing objective and standard B21 of Clause 55.04-5.

Map 7 - Solar Controls
MOUNT GAMBUT PLANNING SCHEME

Wind
This clause only applies to buildings and works with a total building height of 20m or more
(or 15m or more on corner sites).
A permit should not be granted for buildings and works that would cause unsafe wind
conditions or cause exceedance of comfortable wind conditions.

Access and Movement
Development should respond to the MPAC road network classification shown in Map 8.
Development with direct access to pedestrian laneways identified in Map 8 should provide
activation of the laneway through use or built form. Separate pedestrian and vehicular
entries should be provided to the laneway, as appropriate.
Vehicular access to sites should be provided in accordance with the following hierarchy
(from highest to lowest preference):
- Vehicular laneways
- Pedestrian laneways
- Local streets
- MPAC loop
- Secondary pedestrian streets
- Primary pedestrian streets
- Arterial roads

Vehicle access splays are required for:
- Sites on the corners of Puckle Lane, Hallkeeper Lane and the unnamed laneway south
  of Shuter Lane (between Shuter Street and Pratt Street) should provide adequate splays
  for a 6.4m small rigid vehicle, or to the satisfaction of the responsible authority.
- Properties on the inside bend of two laneways should provide a minimum 3m x 3m
  splay, or alternative design that facilitates access by the 1699 design car from
  AS2890.1-2004, to the satisfaction of the responsible authority.

Any setbacks or splays of buildings from laneways can extend over the laneway at the
upper levels, provided a minimum 3.5m headroom clearance is maintained.
Where laneways intersect the footpaths of public streets, pedestrian visibility splays of 2m
wide by 2.5m deep should be provided on both sides of the laneway, or to the satisfaction
of the responsible authority. Splays are not required on the driver’s side (when exiting the
laneway) where the laneway is greater than 5m in width.
5.0 Bicycle parking

All development must provide resident bicycle parking at a minimum rate of 1 space per dwelling. Bicycle parking must be designed to meet the requirements of Clause 52.34-6 or AS2890.3-2015. A permit cannot be granted to vary this requirement.

All development must provide conveniently located office bicycle parking at a minimum rate of 1 space per 150sqm of net floor area. A permit cannot be granted to vary this requirement.

Office development should provide high quality end of trip facilities.
6.0 Precinct provisions

6.1 Precinct 1 – Civic and Community

6.1-1 Precinct map

6.1-2 Precinct objective

To establish the precinct as the principal civic, community and transportation hub for the MPAC.
6.1-3 Precinct requirements

Connect the existing laneway to the east of Pascoe Vale Road. The large site identified as IA on the Precinct Map should:

- deliver an east-west laneway to improve pedestrian access to Moonee Ponds Central and provide separation from the heritage site to the south
- provide an active interface to Mt Alexander Road, Kellaway Avenue and Pascoe Vale Road and provide off-street servicing
- respect adjacent heritage buildings by locating building mass away from sensitive interfaces
- provide a minimum FAR of 1:1 (within the overall allowed FAR) to non-accommodation uses.

6.1-4 Precinct guidelines

Support the delivery of an enhanced public transport interchange that improves pedestrian safety and amenity.

Improve pedestrian links through the precinct from the retail core to Queens Park.

Support the ongoing civic use of the Clocktower Centre incorporating services for the community, the performing arts and social and corporate activities.

Encourage new development to contribute to the civic and community role of the precinct.

Contribute to the character of the precinct by designing buildings that are 'set in the landscape' with opportunities for deep soil planting.
6.2 Precinct 2 – Hall and Homer

6.2-1 Precinct map

![Precinct Map Image]

6.2-2 Precinct objective

To encourage retail, office and entertainment uses with accommodation on upper levels.

6.2-3 Precinct requirements

Reinforce Hall Street as a human scale active street by delivering small scale tenancies (nominally 5m maximum width) set within a well-designed facade. Large sites identified as 2A, 2B and 2C on the Precinct Map should:

- deliver a “hybrid” model of development that includes a mixture of building scales and typologies, including medium-scale development with carefully located towers.
provide a sensitive interface to Taylor Street by locating medium-scale development at the north of the site (22 metres) and providing a ground floor landscaped setback (minimum 3m)

- Sites 2A and 2B should deliver north-south laneways with active frontages and pedestrian priority
- Site 2C should connect Hallkeeper Lane, to be designed primarily as a vehicular laneway for rear access

provide ground level public open space that complies with the design requirements set out in Moonee Ponds Activity Centre: Public Open Space (Moonee Valley City Council, 2019)

provide ground floor setbacks on Hall Street, Homer Street and Eddy Street (as per the Precinct Map) to support streetscape improvements and increased pedestrian capacity

- ensure the siting and design of buildings and works avoids overshadowing of any new ground level public open space
- provide a minimum FAR of 1:1 (within the overall allowed FAR) to non-accommodation uses.

6.2.4 Precinct guidelines

Connect the precinct with Puckle Street as the principal spine of the MPAC.

Enhance Hall Street as a major movement link connecting the station with the public transport interchange.

Deliver mixed use developments where the primary outlook is to the street.

Ensure pedestrians and street planting are prioritised by minimising crossovers on street frontages.

Provide a connective laneway network.

Minimise the impact of vehicle access and servicing on primary active streets.

Vehicle access and servicing is encouraged to rear laneways, particularly Hallkeeper Lane instead of Hall Street or Puckle Street.
6.3 Precinct 3 – Young

6.3-1 Precinct map

6.3-2 Precinct objective

To encourage the use and development of land for retail, market, educational, medical and office uses.

6.3-3 Precinct requirements

The large site identified as 3A on the Precinct Map should:

- deliver a “hybrid” model of development that includes a mixture of building scales and typologies, including medium-scale development with carefully located towers and ground floor communal open space.
 MOOLOOM PLANNING SCHEME

- provide a sensitive interface to Gladstone Street by locating medium-scale development at the south of the site (22m) and providing a ground floor landscaped setback (minimum 3m)
- reinstate Pratt Street as a human scale active street by delivering small scale tenancies (nominally 3m maximum width) set within a well-designed facade
- deliver ground level public open space that complies with the design requirements set out in Moonee Ponds Activity Centre: Public Open Space (Moonee Valley City Council, 2019)
- provide a minimum 3m ground floor setback along Young Street to accommodate streetscape improvements and increased pedestrian capacity
- ensure the siting and design of buildings and works avoids overshadowing of any new ground level public open space.
- provide a minimum FAR of 1:1 (within the overall allowed FAR) to non-accommodation uses.

The large site identified as 3B on the Precinct Map should:
- provide a sensitive interface to Gladstone Street by locating medium-scale development at the south of the site (22m) and providing a ground floor landscaped setback (minimum 3m)
- provide a minimum 3m ground floor setback along Young Street to accommodate increased pedestrian capacity
- provide a minimum FAR of 1:1 (within the overall allowed FAR) to non-accommodation uses.

6.3.4 Precinct guidelines

Enhance pedestrian movement, safety and amenity through the laneways of the precinct.
Deliver medium density mixed use where the primary outlook is to the street.
Encourage heritage materials such as brick and bluestone in new developments fronting St Aidans Lane and Penny Lane.
Provide active interfaces onto St Aidans Lane and Penny Lane and minimise the impact of servicing.
Ensure pedestrians and street planting are prioritised by minimising crossovers on street frontages.
6.4 Precinct 4 – Puckle – Retail Core

6.4-1 Precinct map

6.4.2 Precinct objectives

To maintain the precinct as the core retail spine for MPAC.
To maintain the heritage streetscape of Puckle Street.

6.4.3 Precinct guidelines

Reduce through-traffic movements along Puckle Street.
MOORIZE VALLEY PLANNING SCHEME

Ensure that development accommodates retail, entertainment and restaurant uses at ground level, with office and residential uses above.
Deliver low scale mixed use developments where the primary outlook is to the street.
Encourage party-walling to ensure that the fine-grain character of Puckle Street is retained.
Design buildings that respond to the heritage character of Puckle Street.
Provide adequate setbacks above heritage buildings, small scale tenancies and awnings.
Ensure that buildings are designed in the round with consideration of how they are viewed when approaching Puckle Street.
Reinforce Puckle Street as a human scale active street by delivering small scale tenancies (nominally 5m maximum width).
Provide car parking and loading access via rear laneways.
6.5 Precinct 5 – Holmes

6.5-1 Precinct map

6.5-2 Precinct objective

To provide for small scale office and retail development and medium density housing.

6.5-3 Precinct requirements

Encourage sub-precinct 5A to be used for residential purposes.
Encourage development along Holmes Road and Norwood Crescent with retail uses on the ground floor.
Encourage development in sub-precinct 5B along Sydenham Street to incorporate small-scale office uses with residential uses on upper levels.

Ensure any redevelopment at 1-9 Holmes Road includes community uses, such as a recreation facility or place of assembly.

6.5-4 Precinct guidelines

Encourage the development of significant community facilities within sub-precinct 5B.

Maintain a built form scale that is respectful of adjoining residential areas.

Improve east/west connections through the precinct.

Deliver a low to mid-rise precinct with increased heights along the railway line and adequate separation between buildings including rear setbacks.

Encourage primary outlook to the street.

Provide a transition between low and mid-rise buildings by providing ground floor landscaped setbacks at sensitive residential interfaces.

Reinforce Holmes Road as a primary street by delivering ground floor active uses.

Encourage party-walling to ensure that the fine-grain character of Holmes Road is retained.

Discourage side setbacks which can inadvertently encourage consolidation.
6.6 Precinct 6 – Shuter

6.6-1 Precinct map

6.6-2 Precinct objective

To provide a focus for offices and community services, including medical suites and childcare.

6.6-3 Precinct requirements

Encourage the establishment of medical and small scale office uses within the precinct, with residential uses above.

Encourage development with residential uses at ground level along Moore Street.
Ensure any redevelopment at 11-25 Shuter Street provides above ground car parking or public open space with underground car parking.

6.6.4 Precinct guidelines

- Encourage the integrated development of the precinct including a significant community use.
- Improve pedestrian connections to and from the precinct.
- Deliver ground floor active uses around the proposed Shuter Street park and contribute to safety by maximising opportunities for passive surveillance.
- Deliver a mid-rise precinct with adequate separation between buildings including ground floor rear setbacks.
- Encourage primary outlook to the street.
- Provide a transition between low and mid-rise buildings by providing ground floor landscaped setbacks at sensitive residential interfaces.
- Deliver ground level active uses along Shuter Street to contribute to its role as a primary active street with pedestrian priority.
6.7 Precinct 7 – Junction South

6.7-1 Precinct map

6.7-2 Precinct objectives

To encourage retail and entertainment uses to locate along Mt Alexander Road, with residential and office uses above.

To provide a progression of built form height, from lower scale development at the southern end of the precinct to taller built forms within the Junction.

6.7-3 Precinct requirements

Provide ground floor setbacks on Dean Street (as per the Precinct Map) to support streetscape improvements and increased pedestrian capacity.
MOONEE VALLEY PLANNING SCHEME

The large site identified as 7A on the Precinct Map should:

- deliver publicly accessible ground level open space that complies with the design requirements set out in the *Moonee Ponds Activity Centre: Public Open Space* (Moonee Valley City Council, 2019)
- provide a minimum FAR of 1:1 (within the overall allowed FAR) to non-accommodation uses.

### 6.7.4 Precinct guidelines

Deliver a mid-rise precinct with heights increasing around the Junction.

Encourage party-walling to ensure that the fine-grain character of Mt Alexander Road is retained.

Discourage side setbacks as they can inadvertently encourage consolidation.

Provide a continuous active street wall by providing servicing via rear lanes and streets.

Provide a transition between low and mid-rise buildings by providing ground floor landscaped setbacks to sensitive residential interfaces.

Encourage sub-precincts 7E and 7G to be used for residential purposes.
6.8 Precinct 8 – Dean

6.8-1 Precinct map

6.8-2 Precinct objectives

To encourage office and residential uses including home-based businesses.
6.8-3 Precinct requirements

Provide ground floor setbacks on Alexandra Avenue and Dean Street (as per the Precinct Map) to support streetscape improvements and increased pedestrian capacity.

The large site identified as 8C on the Precinct Map should provide north-south through block links to improve pedestrian permeability and break up massing.

Sub precincts 8A, 8B, 8F and 8G should widen the rear laneway and ensure servicing is located away from the street frontage.

Large sites identified as 8A, 8B, 8C and 8D on the Precinct Map should provide a minimum FAR of 1:1 (within the overall allowed FAR) to non-accommodation uses.

6.8-4 Precinct guidelines

Deliver a low to mid-rise precinct with heights that provide an appropriate response to sensitive residential interfaces.

Provide vehicle access and servicing requirements via rear lanes, where possible.

Deliver ground level active uses along Alexandra Avenue to contribute to its role as a primary active street that connects the precinct to central Moonee Ponds.

Deliver ground level active uses along Pascoe Vale Road to contribute to its role as a primary active street.

Provide a transition between low and mid-rise buildings by providing ground floor landscaped setbacks to sensitive residential interfaces.

Reinstate existing laneways if sites are redeveloped.

Minimise overshadowing to future open space and private backyards.
6.9 Precinct 9 – Racecourse

6.9-1 Precinct map

Note: All of Precinct 9 is covered by a Heritage Overlay (H0379). The subprecinct boundaries in Precinct 9 are indicative only and are to be finalised as part of the Staging Plan required by Clause 6 of this Schedule to the satisfaction of the Responsible Authority.
6.9-2 Precinct objectives

To encourage residential, retail, commercial and employment opportunities that will enhance the role and function of MPAC and the Moonee Valley Racecourse.
To encourage a street pattern, building design and land use mix that creates opportunities for street level activation, passive surveillance of the street and changing streetscapes.
To create new and vibrant public spaces for the community.
To enable taller and more intense bulk form in the eastern section of the precinct which provides for a transition in height from established residential areas to the north, south and west.
To encourage a street pattern and subdivision layout which encourage walking and cycling over other modes of transport.
To ensure a high standard of building design that displays dwelling diversity, permeability, flexibility, site responsiveness and environmentally sustainability.
To encourage diversity in housing opportunities, including affordable housing options.

6.9-3 Precinct requirements

Transport Assessment and Management Plan and Integrated Transport Plan

A permit cannot be granted for use, development and/or subdivision of the whole or any part of Precinct 9 until a Transport Assessment and Management Plan and Integrated Transport Plan are prepared to the satisfaction of the responsible authority, Vic Roads and Public Transport Victoria.

The Transport Assessment and Management Plan and Integrated Transport Plan must be based on an assessment of the likely transport impacts of the proposed full development of the whole of Precinct 9, recognising the staged development potential of the site over a 15 to 20 year timeframe.

Any permit granted in Precinct 9 must be consistent with the approved Transport Assessment and Management Plan and Integrated Transport Plan.

Building height

A permit cannot be granted for buildings and works which exceed the maximum building height specified in Table 1.

<table>
<thead>
<tr>
<th>Sub-Precinct</th>
<th>Mandatory maximum building height (excluding basement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9A</td>
<td>20 metres</td>
</tr>
<tr>
<td>9C</td>
<td>11 metres</td>
</tr>
<tr>
<td>9E</td>
<td>14 metres</td>
</tr>
<tr>
<td>9H</td>
<td>32 metres</td>
</tr>
</tbody>
</table>

Discretionary building heights apply for the following sub-precincts shown in Table 2.

<table>
<thead>
<tr>
<th>Sub-Precinct</th>
<th>Discretionary building height (excluding basement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9B</td>
<td>20 metres</td>
</tr>
<tr>
<td>9D</td>
<td>32 metres</td>
</tr>
<tr>
<td>9F</td>
<td>50 metres</td>
</tr>
<tr>
<td>9G</td>
<td>32 metres</td>
</tr>
</tbody>
</table>
The preferred maximum building heights specified in Table 3 should not be exceeded.

**Table 3 – Preferred Maximum Building Heights**

<table>
<thead>
<tr>
<th>Sub-Precinct</th>
<th>Preferred maximum building height (excluding basement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9B</td>
<td>32 metres</td>
</tr>
<tr>
<td>9D</td>
<td>50 metres</td>
</tr>
<tr>
<td>9F</td>
<td>62 metres</td>
</tr>
<tr>
<td>9G</td>
<td>50 metres</td>
</tr>
</tbody>
</table>

### 6.9.4 Precinct guidelines

**Built Form**

The following guidelines should be met:

- Setbacks set out in Table 4.

**Table 4 - Street setbacks**

<table>
<thead>
<tr>
<th>Interface (Shown on the precinct map)</th>
<th>Street setback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Front Interface (Racecourse) – Type 1</td>
<td>Minimum 3 metres to the street for buildings up to a height of 11 metres (3 storeys) from ground floor level. Building elements fronting the street above 11 metres (3 storeys) in height set back at an angle of 45 degrees (1:1) from the street wall up to the maximum building height in Table 1 at Clause 5.9-3.</td>
</tr>
<tr>
<td>Residential Front Interface (Racecourse) – Type 2</td>
<td>Minimum 3 metres to the street up to a height of 14 metres (4 storeys) from ground floor level. Building elements above 14 metres (4 storeys) set back 5 metres from the street wall up to the maximum building height in Table 1 at Clause 5.9-3.</td>
</tr>
<tr>
<td>Racecourse Interface - Type 1</td>
<td>Minimum 5 metres to the street up to the maximum building height in Table 1 at Clause 5.9-3.</td>
</tr>
</tbody>
</table>
### Moombe Valley Planning Scheme

<table>
<thead>
<tr>
<th>Interface (Shown on the precinct map)</th>
<th>Street setback</th>
</tr>
</thead>
<tbody>
<tr>
<td>All other streets in precinct 9</td>
<td></td>
</tr>
</tbody>
</table>

- Minimum 5 metres to the street up to a height of 20 metres (6 storeys) from ground floor level.
- Building elements above 20 metres (6 storeys) set back 5 metres from the street wall up to the maximum building height in Table 1 at Clause 5.9.3.

- Built form of more than 45 metres in height should be separated by a minimum of 25 metres from other buildings of more than 45 metres in height.
- Where a podium tower built form is proposed, the tower should not occupy more than 50 per cent of the podium footprint.
- Retaining walls within street setbacks should not exceed 1.2 metres in height.
- Balconies located at ground level should not exceed 1.2 metres in height from ground floor level.
- Balconies may project into the setback area, providing design excellence is demonstrated.
- Development should activate the new and existing streets and encourage passive surveillance.
- Built form should respond appropriately to sensitive interfaces in terms of scale, visual mass, overshadowing and overlooking.
- Where residential dwellings front public space at street level, the setback should be landscaped and articulated vertically and horizontally to create well designed public realm.
- Where retail uses front public space at street level, the setback may be used for outdoor seating and furniture.
- Built form should be carefully designed to maintain reasonable levels of sunlight to public spaces at the September equinox.
- Future development should be designed to carefully consider impacts on the amenity of other uses within the Precinct.
- Future development should be designed to minimise wind effects on key public realm areas.
- Car parking for residential development should be provided below ground level.

### Use

The following guidelines should be met:

- Encourage mixed use development within Sub-precincts 9D, 9E, 9F, 9G and 9H.
- Encourage predominantly residential development within Sub-precincts 9A, 9B and 9C.

### Transport/Movement

The following guidelines should be met:

- Kenn Street, and Alexandra Avenue should be extended east into the Precinct to extend the existing street based network.
- A new north-south street should be established along the eastern edge of the Precinct to create a connection between Dean Street and Thomas Street.
- Pedestrian and bicycle connections between the Moombe Ponds Creek Trail and Precinct 8 along Wilson Street and Dean Street should be improved.
- There should be no crossovers for individual dwellings fronting McPherson Street, Thomas Street and Dean Street.
Pedestrian access should allow safe and convenient access for patrons going to and from the Racecourse.

Open Space
The following guidelines should be met:
- Public open space should be designed to ensure that it:
  - Is located consistent with the Precinct Map in the form of a single park of not less than 5000 square metres and additional open spaces up to 2000 square metres (not including land set aside for road reserves, at-grade car parking areas, shared pedestrian and vehicle zones or drainage treatments).
  - Contributes to the diversity of recreation and leisure options available to the community.
  - Receives good levels of sunlight.
  - Is accessible and inviting to the wider population.
  - Accommodates gateways in the Precinct and the Racecourse entry through smaller open space areas.

Multi-purpose Community Facility
The following guidelines should be met:
- A space for a multi-purpose community facility must be provided on site to include:
  - Community meeting rooms
  - Maternal and Child Health rooms
  - Kindergarten/long day child care

Consider the opportunity to incorporate the multi-purpose community facility into any remaining heritage buildings or features of the site (e.g. Main Tote building, Stables).

6.9-5 Any other requirements

Agreement
Before a permit is granted for any use, development or subdivision within Precinct 9, the owner of the land must enter into an agreement with the responsible authority under Section 173 of the Planning and Environment Act 1987, for the provision of:
- A public open space contribution in the form of a single park equivalent to 5000 square metres, and additional open spaces up to 2000 square metres.
- A financial contribution equivalent to the construction of two full sized AFL/Cricket playing fields, including lights and car parking.
- A financial contribution equivalent to the construction of a 500 square metre sporting pavilion.
- Contributions or delivery/upgrade on-site or off-site for physical and community infrastructure, having regard to the demand generated by the anticipated additional population within Precinct 9, including:
  - Contribution towards or provision of public art on the site. There is potential to draw upon the racing activities of the land and incorporate this with the retention of heritage features or buildings
  - Financial contributions equivalent to 30 per cent of the construction cost of a Multi-Purpose Community Facility on-site (based on a 500 square metre facility) in accordance with the approved Staging Plan as specified at Clause 6.0 of this Schedule
  - Any identified transport mitigation measures and infrastructure identified in the Integrated Transport Plan
  - The timing for delivery of infrastructure at agreed trigger points which are to be based upon the release of residential lots set out in the approved Staging Plan as specified at Clause 6.0 of this Schedule.
7.0 Application requirements

Buildings and Works

The following application requirements apply to an application for a permit under Clause 37.08, in addition to those specified in Clause 37.08 and elsewhere in the scheme and must accompany an application, as appropriate, to the satisfaction of the responsible authority:

- Sections of the proposed building(s).
- For a development of four or more storeys:
  - A three-dimensional representation of the proposed development within the streetscape in the context of adjacent development.
  - Streetscape elevations showing the existing streetscape, the proposed development and how the proposal sits within the elevation.
  - Information which shows the form of the proposal as oblique views from neighbouring streetscapes where any part of the proposal will be visible.
  - An ‘as completed’ representation of the development inclusive of all external services and equipment.
  - A ‘screening’ plan of all external services and equipment including on the rooftop.
- For the construction of new dwellings in buildings of four storeys or less, an assessment against the relevant provisions of Clause 54 or Clause 55.
- For the construction of a new building, an Environmentally Sustainable Design (ESD) Statement which outlines the ESD initiatives included within the proposal.
- A Pedestrian Wind Environment Assessment prepared by a suitably qualified person in accordance with the Guidelines for Planning Applicants in MPAC: Wind (Moonee Valley City Council, 2019) must accompany a planning application for:
  - Corner sites – buildings and works for developments of 15m or higher
  - All other sites – buildings and works for developments of 20m or higher
  - Any other development that the responsible authority determines has the potential to create unacceptable wind impacts
- A waste management plan that meets the requirements of the Waste Management Plans — Guidelines for Planning Applicants (Moonee Valley City Council, 2019)
- An application for a permit on public land by a person other than the relevant public land manager must be accompanied by the written consent of the public land manager, indicating that the public land manager consents generally or conditionally either:
  - To the application for the permit being made
  - To the application for permit being made and to the proposed use or development
- Details, as appropriate, of any upgrading of adjacent footpaths or laneways to the standards outlined in the Moonee Ponds Activity Centre: Streetscapes and Public Spaces (Moonee Valley City Council, 2019), to the satisfaction of the responsible authority.
- Where vehicular movement in a laneway is expected to cause potential material traffic or pedestrian impact, a traffic impact assessment that demonstrates that development adjacent to a laneway can safely accommodate the anticipated increased traffic volumes.

Precinct 9

In addition to the above, an application to construct a building or construct or carry out works in Precinct 9 must be accompanied by the following information, as appropriate:

- A Staging Plan outlining:
The proposed stages of development
- When key components including infrastructure, roads, access ways and parks are to be provided, and how remaining precnets will be managed in the interim
- The staging of non-residential development
- The interfaces between new residential development, existing residential development and the Raccoursy are addressed.

**A Transport Assessment and Management Plan** that includes, but is not limited to:
- The likely traffic and pedestrian generation of the proposed development taking into account the surrounding land uses
- Results from micro-simulation modelling showing the likely traffic impacts of the proposed development on the land, the broader road network and public transport
- Mitigation measures required to address any traffic impacts and alleviate unreasonable delays to public transport arising from the development
- A road safety audit of the design and proposed traffic management measures and incorporating the recommendations
- Road layouts, widths and reserves, intersection treatments and site access
- Traffic management measures and signalisation, including proposed tram and bus priority measures
- Movement networks within the precinct for vehicles, bicycles and pedestrians
- The design of the footpaths, bicycle paths and shared pathways network
- Existing and proposed public transport routes and stops near the site.

**An Integrated Transport Plan** that includes, but is not limited to:
- The expected demand for travel by people who will live, work or visit the site and target transport modes split to encourage walking, cycling and use of public transport by future residents
- Existing and proposed public transport routes, stops and infrastructure (e.g. shelters, islanded bays, signage, pedestrian crossings) within the site and surrounds
- An indicative hierarchy of internal local roads proposed for the site that:
  - complements the surrounding network
  - recognises the primacy of pedestrian and bicycle access within the site
  - provides a high level of amenity and connectivity while managing the movement of vehicles travelling on Wilson Street, Dean Street, McPherson Street and Thomas Street
  - allows for appropriate levels of manoeuvrability for emergency and service vehicles; and are of sufficient width to accommodate wide footpaths, new trees and bicycle lanes
- The provision of a network of safe and convenient pedestrian and bicycle accessways to and through the site and connecting with public transport stops and the surrounding area, and encouraging the use of sustainable travel modes to local amenities
- Recommended car parking and bicycle parking rates and the location and layout of on-site car and bicycle parking areas and access to and from them
- Opportunities for providing a car share scheme
- Provision for loading and unloading of vehicles, including waste collection and delivery vehicles, and means of access to and from them
- Green Travel Plan initiatives, including a new resident awareness and education program
- Opportunities for providing improved public transport services and facilities
MOOREE VALLEY PLANNING SCHEME

- The means proposed to address and mitigate the impacts of traffic generated by the development on the surrounding road network, including any unreasonable delays to public transport services, including:
  - any required upgrades or modifications (e.g. road widening, re-allocation of road space, parking restrictions, traffic and pedestrian signals, walking and cycling infrastructure improvements, and public transport improvements)
  - estimated costs of the mitigation measures
  - how and when the mitigation measures should be funded and delivered
- Any interim measures that should be undertaken until such time as major transport infrastructure provision is undertaken.
- Provision for continuing monitoring and review of the implementation of the plan.

- **A Serviced Engineering Infrastructure Plan**, which includes:
  - An assessment of the existing engineering infrastructure servicing the site and its capacity to service the proposed development
  - A description of the proposed provision of all appropriate utility services to development parcels
  - Preparation of a stormwater drainage master plan, including measures to ensure appropriate protection of the Moonee Ponds Creek adjacent to the land
  - The identification of the location of any on-site drainage retention facilities.

- **An Environmental Sustainable Design Plan**, which demonstrates:
  - The incorporation of recognised technologies and best practice where practical
  - Energy conservation, with the objective of contributing to industry standards of national and international efforts to reduce energy use and greenhouse gas emissions
  - Water conservation, ensuring water resources are managed in a sustainable way
  - Water sensitive urban design and options ensuring the reduction of the impacts of stormwater on bays and catchments consistent with general principles as detailed in the Urban Stormwater Best Practice Environmental Management Guidelines (Melbourne Water)
  - Transport planning with the aim of encouraging walking, cycling and use of public transport
  - Land-use and transport planning and infrastructure provision to contribute where practical to improved air quality
  - Options to reduce the amount of waste generated and encourage increased value recovery and/or recycling of waste materials
  - Building materials conservation
  - Sustainability options in demolition and construction practices
  - Landscaping considering the provision of habitat, green spaces, and climate control as appropriate
  - Indoor environmental quality and healthy internal environments.

- **Stormwater and Drainage Plans** including those relating to water conservation, treatment and reuse facilities.

- **A Heritage Impact Statement**, considering the recommendations of an approved Conservation Management Plan or relevant Incorporated Plan, prepared to the satisfaction of the responsible authority, which addresses changes to items of heritage interest including the Club Secretary House and Garden, the S.R. Burnet Stand, Alistair Clark Rose Garden and Manikato Garden, Main Tote, Horse Stalls/Birdcage and Perimeter Fence along Dean Street. The Impact Statement should outline the initiatives proposed to interpret, document or relocate (as appropriate) the built form or elements of those buildings or gardens within Precinct 9 prior to the commencement of the development that is the subject of the permit application.
A Construction Management Plan which includes, but is not limited to, the following:

- Staging of construction
- Management of public access and linkages around the site during construction
- Site access, parking and traffic management
- Any works within the road reserves of surrounding streets
- Any impacts on public transport operations
- Sediment control and site drainage
- Hours of construction
- Control of noise, dust and soiling of roadways
- Discharge of polluted waters
- Demolition and excavation
- Storage of construction materials
- Location of site offices, and cranes
- Public safety
- Management of potentially contaminated materials
- Collection and disposal of building and construction waste
- Methodology for responding to complaints associated with the construction works
  and provide site manager contact details.

All development must be carried out in accordance with the approved Construction Management Plan to the satisfaction of the responsible authority.

8.0 Notice and review

An application to construct a building or construct or carry out works is not exempt from the notice requirements of Section 52(1)(a), (b) and (d), the decision requirements of Section 64(1), (2) and (3) and the review rights of Section 82(1) of the Act if the proposal exceeds the preferred maximum building height in Map 2 (for precincts 1-8) and Clause 6.9-3 (for precinct 9).

An application to use the land for the purposes of a Gambling premises, Hotel, Place of assembly or Bar is not exempt from the notice requirements of Section 52(1)(a), (b) and (d), the decision requirements of Section 64(1), (2) and (3) and the review rights of Section 82(1) of the Act.

9.0 Decision guidelines

The following decision guidelines apply to an application for a permit under Clause 37.08, in addition to those specified in Clause 37.08 and elsewhere in the scheme, to construct a building or construct or carry out works, which must be considered, as appropriate, by the responsible authority:

- Any advice received from the Victorian Design Review Panel (or similar), for the development of land identified as a large site at Map 4
- Whether the development contributes to the delivery of affordable housing
- Whether the proposed use is consistent with the objectives and guidelines of the precinct.

Whether new development:

- locates main entry foyers to address road frontages, with service and secondary entries away from the main frontage
- has a cumulative effect which supports a high quality of pedestrian amenity in relation to human scale and microclimate conditions within the public realm including overshadowing and mitigating wind impacts
MOORIEE VALLEY PLANNING SCHEME

- demonstrates via a Pedestrian Environment Wind Analysis Report that both safety and comfort criteria are achieved in public areas
- protects important existing and potential public spaces and streets from overshadowing
- incorporates Water Sensitive Urban Design (WSUD) principles
- locates primary vehicle and loading access from the local access roads, as specified in the Moonee Ponds Framework Plan at Clause 1.0
- avoids podium car parking, unless it is creatively screened or sleeved by other uses
- minimises the number of access points to on-site car parking from any road; provides a minimum setback to enable vehicles to drive in; and provides clearly delineated vehicle crossovers to ensure minimal disruption of the pedestrian environment and traffic flows
- reflects the important horizontal and vertical patterns of local building stock through careful definition of building levels, entries, fenestration and the proportion and division of solid and transparent façade elements
- incorporates active uses to the roof areas of buildings, either as open space for building users or as part of a green roof sustainability initiative
- identifies opportunities for appropriately located solar panels
- limits the use of non-renewable construction materials and utilises building materials that are low in embodied energy.

Whether residential development:

- allows for the establishment of contained landscaped plantings on upper level terraces, decks or balconies that contribute to both the internal amenity of a dwelling and the public domain.

10.0 Signs

Sign requirements are at Clause 52.05.
All land located within Sub-precincts 2D, 3A, 7E, 7F, 7G, 8B, 8E, 8G, 8H and Precinct 9 is in Category 3. All other land is in Category 1.

11.0 Other provisions of the scheme

None specified.

12.0 Policy documents

MPAC to 2040 – Moonee Ponds Activity Centre Local Plan (Moonee Valley City Council, 2019)
Moonee Ponds Activity Centre: Affordable Housing (SGS Economics & Planning, 2019)
Moonee Ponds Activity Centre: Built Form (Hodyl & Co, 2019)
Moonee Ponds Activity Centre: Employment and Floor Space (SGS Economics and Planning, 2019)
Moonee Ponds Activity Centre: Public Open Space (Moonee Valley City Council, 2019)
Moonee Ponds Activity Centre: Streetscapes and Public Spaces (Moonee Valley City Council, 2019)
Moonee Ponds Activity Centre Transport (Traffic Group, 2019)
Moonee Ponds Activity Centre: Wind (Moonee Valley City Council, 2019)
MV2040 Action Plan: Community Facilities (Moonee Valley City Council, 2018)
MV2040 Strategy (Moonee Valley City Council, 2018)
Waste Management Plans – Guidelines for Planning Applicants (Moonee Valley City Council, 2019)
SCHEDULE 2 TO THE PARKING OVERLAY

Shown on the planning scheme map as PO2.

MOONEE PONDS ACTIVITY CENTRE

1.0 Car parking objectives

To identify appropriate car parking rates for various uses in the Moonee Ponds Activity Centre.

To prioritise sustainable transport modes.

To reduce the traffic impacts of new developments within the Moonee Ponds Activity Centre.

To provide simplified parking requirements that support redevelopment and changes in use.

2.0 Permit requirement

A permit is required to provide car parking spaces in excess of the maximum number specified in this Schedule.

3.0 Number of car parking spaces required

If a use is specified in the Table below, the maximum number of car parking spaces to be provide for the use is calculated by multiplying the accompanying Rate by the accompanying Measure.

Table 1: Maximum car parking spaces

<table>
<thead>
<tr>
<th>Use</th>
<th>Maximum Rate</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dwelling</td>
<td>1</td>
<td>To each dwelling</td>
</tr>
<tr>
<td>Office</td>
<td>2</td>
<td>To each 110 sq m of net floor area</td>
</tr>
</tbody>
</table>

For all other uses listed in Table 1 of Clause 52.06-5, the maximum number of car parking spaces to be provided for the use is calculated by multiplying the Rate in Column B of that Table by the accompanying Measure.

4.0 Decision guidelines for permit applications

The following decision guidelines apply to an application for a permit under Clause 52.06-3, in addition to those specified in Clause 52.06-7 and elsewhere in the scheme. The responsible authority must consider, as appropriate:

- Whether the objectives of this schedule have been met.
- The impacts of the proposed car parking rates on creating sustainable transport patterns that preference walking, cycling and public transport use.
- The impact on the road network of providing car parking in excess of the maximum rate.
- The number and type of dwellings proposed, including the proportion of dwellings that contain three or more bedrooms.
- The impact of the proposed car parking rates on local amenity, including pedestrian amenity and the creation of a high quality public realm.
- The provision of alternative transport modes, including but not limited to car share, motorcycle and bicycle parking.
- The adaptability of above ground car parking areas to transition to other uses in future.
6.0 Financial contribution requirement
None specified.

6.0 Requirements for a car parking plan
None specified.

7.0 Design standards for car parking
None specified.

8.0 Decision guidelines for car parking plans
None specified.

9.0 Policy Document
Moonee Ponds Activity Centre: Transport (Traffic Group, 2019)
SCHEDULE TO CLAUSE 72.03

Maps comprising part of this scheme:

- 1, 1DDO, 1DPO, 1HO, 1MAEO
- 2, 2DDO, 2DPO, 2EAO, 2ESO, 2HO, 2LSIO, 2SSO
- 3, 3DDO, 3EAO, 3ESO, 3HO, 3IPO, 3LSIO, 3PAO, 3SSO
- 4, 4DDO, 4EHO, 4LSEO, 4PAO
- 5, 5DDO, 5DPO, 5ESO, 5HO, 5IPO, 5LSIO, 5MAEO, 5SSO
- 6, 6DDO, 6DPO, 6ESO, 6HO, 6LSIO, 6PAO, 6SSO
- 7, 7CLPO, 7DDO, 7EHO, 7HO, 7NCO, 7PAO, 7SSO
- 8, 8CLPO, 8DDO, 8EAO, 8ESO, 8HO, 8IPO, 8LSIO, 8SSO
- 9, 9DDO, 9EESO, 9HO, 9IPO, 9LSIO, 9MAEO
- 10, 10DDO, 10ESO, 10HO, 10IPO, 10LSIO, 10PAO, 10SSO
- 11, 11DDO, 11DPO, 11HO, 11IPO, 11LSIO, 11PAO, 11SSO
- 12, 12DDO, 12DPO, 12ESO, 12HO, 12IPO, 12LSIO, 12NCO, 12SSO
- 13, 13CLPO, 13DDO, 13HO, 13IPO, 13LSIO, 13NCO, 13PAO
- 14, 14DDO, 14DPO, 14ESO, 14HO, 14IPO, 14LSIO, 14PAO, 14SSO
- 15, 15DDO, 15EAO, 15ESO, 15HO, 15IPO, 15NCO, 15SSO
- 16, 16CLPO, 16DDO, 16DPO, 16EAO, 16ESO, 16HO, 16IPO, 16LSIO
# SCHEDULE TO CLAUSE 72.08 BACKGROUND DOCUMENTS

<table>
<thead>
<tr>
<th>Name of background document</th>
<th>Amendment number - clause reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airport West Activity Centre Structure Plan (Hansen Partnership, 2008)</td>
<td>C107 Clause 02 and 11</td>
</tr>
<tr>
<td>City of Moonee Valley Affordable Housing Background Research Paper (Beverley Kliger &amp; Associates, 2012)</td>
<td>C134 Clause 16</td>
</tr>
<tr>
<td>City of Moonee Valley Employment Forecasts (SGS Economics and Planning, 2018)</td>
<td>C192 Clauses 02 and 17</td>
</tr>
<tr>
<td>City of Moonee Valley Gap Heritage Study (Heritage Alliance and Historica Cultural Heritage Projects, 2005)</td>
<td>C78 Clause 15</td>
</tr>
<tr>
<td>City of Moonee Valley Heritage Guidelines (Moonee Valley City Council, 2018)</td>
<td>C163 Clause 02 and 15</td>
</tr>
<tr>
<td>Essendon Airport Master Plan (Essendon Airport Pty Ltd, 2013)</td>
<td>C121 Clause 17 and 18</td>
</tr>
<tr>
<td>Essendon Conservation Study (Graeme Butler, January 1985)</td>
<td>C4 Clause 15</td>
</tr>
<tr>
<td>Ferntington and Kennington Conservation Study (Graeme Butler &amp; Associates for Melbourne City Council, 1985)</td>
<td>C4 Clause 15</td>
</tr>
<tr>
<td>Heritage Assessment: Moonee Ponds Activity Centre Stage 2 Report (David Helms Heritage Planning, 2011)</td>
<td>C183 Clause 15</td>
</tr>
<tr>
<td>Heritage Overlay Review (David Helms Heritage Planning, 2014)</td>
<td>C144 Clause 15</td>
</tr>
<tr>
<td>Kelor Road Activity Centre Structure Plan (Moonee Valley City Council, 2011)</td>
<td>C117 Clause 02 and 11</td>
</tr>
<tr>
<td>Kelor Road Built Form Guidelines (Moonee Valley City Council, 2012)</td>
<td>C117 Clause 02 and 11</td>
</tr>
<tr>
<td>Maribyrnong River Master Plan (Site Office, Traffic and Storm Consulting, 2011)</td>
<td>C134 Clause 12</td>
</tr>
<tr>
<td>Moonee Ponds Activity Centre Structure Plan (Moonee Valley City Council, 2010, updated 8 June 2012)</td>
<td>C100 Clause 02, 11 and 48</td>
</tr>
<tr>
<td>MPAC to 2040: Moonee Ponds Activity Centre Local Plan (Moonee Valley City Council, 2018)</td>
<td>C207 Clauses 02 and 37.08</td>
</tr>
<tr>
<td>Moonee Ponds Activity Centre: Built Form (Hodv il + Co Pty Ltd, 2019)</td>
<td>C207 Clauses 02 and 37.08</td>
</tr>
<tr>
<td>Moonee Ponds Activity Centre: Streetscapes and Public Spaces (Moonee Valley City Council, 2019)</td>
<td>C207 Clauses 02 and 37.08</td>
</tr>
</tbody>
</table>
### Moonee Valley Planning Scheme

<table>
<thead>
<tr>
<th>Name of background document</th>
<th>Amendment number - clause reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moonee Ponds Activity Centre: Public Open Spaces (Moonee Valley City Council, 2019)</td>
<td>C207moon Schedule to Clause 37.08</td>
</tr>
<tr>
<td>Moonee Ponds Activity Centre: Trailset (Traffic Group, 2019)</td>
<td>C207moon Schedule to Clause 37.08</td>
</tr>
<tr>
<td>Moonee Ponds Activity Centre: Employment and Floor Space (SSS Economics and Planning, 2019)</td>
<td>C207moon Schedule to Clause 37.08</td>
</tr>
<tr>
<td>Moonee Ponds Activity Centre: Affordable Housing (SSS Economics and Planning, 2019)</td>
<td>C207moon Schedule to Clause 37.08</td>
</tr>
<tr>
<td>Moonee Ponds Activity Centre: Wind (Moonee Valley City Council, 2019)</td>
<td>C207moon Schedule to Clause 37.08</td>
</tr>
<tr>
<td>Moonee Ponds Creek Strategic Plan (Land Design Partnership Pty Ltd, Urban Enterprise Pty Ltd and Corder Associates Pty Ltd, 2011)</td>
<td>C134 Clause 12</td>
</tr>
<tr>
<td>Moonee Valley Asset Management Strategy (Moonee Valley City Council, 2011)</td>
<td>C134 Clause 19</td>
</tr>
<tr>
<td>Moonee Valley City Council Electronic Gambling Machine Gambling Background Paper (Beverley Kligler &amp; Associates, 2012)</td>
<td>C140 Schedule to Clause 52.28</td>
</tr>
<tr>
<td>Moonee Valley City Council Significant Tree Register (Homewood Consulting Pty Ltd, 2016)</td>
<td>C179 Clause 12</td>
</tr>
<tr>
<td>Moonee Valley City Sustainability Policy (Moonee Valley City Council, August 2013)</td>
<td>C134 Clause 12</td>
</tr>
<tr>
<td>Moonee Valley Flood Management Plan (Sinclair Knight Merz, 2011)</td>
<td>C134 Clause 13</td>
</tr>
<tr>
<td>Moonee Valley Gaming Policy – Reference Document (10 Consulting Group, 2014)</td>
<td>C140 Schedule to Clause 52.28</td>
</tr>
<tr>
<td>Moonee Valley Greenhouse Strategy (Moonee Valley City Council, 2010)</td>
<td>C134 Clause 12</td>
</tr>
<tr>
<td>Moonee Valley Heritage Gap Study (Context Pty Ltd, 2014)</td>
<td>C193moon Clause 15</td>
</tr>
<tr>
<td>Moonee Valley Heritage Strategy (Moonee Valley City Council, 2011)</td>
<td>C134 Clause 15</td>
</tr>
<tr>
<td>Moonee Valley Heritage Study 2015 (Context Pty Ltd, 2016)</td>
<td>C164 Clause 15</td>
</tr>
<tr>
<td>Name of background document</td>
<td>Amendment number - clause reference</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>Moonee Valley Leisure Strategy (Moonee Valley City Council, 2013)</td>
<td>C134 Clause 19</td>
</tr>
<tr>
<td>Moonee Valley Licensed Premises Policy Background Paper (Moonee Valley City Council, 2012)</td>
<td>C131 Clause 13</td>
</tr>
<tr>
<td>Moonee Valley Neighbourhood Character Study (Planisphere, 2012)</td>
<td>C126 Clause 15</td>
</tr>
<tr>
<td>Moonee Valley Thematic Environmental History (Living Histories, 2012)</td>
<td>C134 Clause 15</td>
</tr>
<tr>
<td>Moonee Valley Thematic Places Heritage Study (Context Pty Ltd, 2014)</td>
<td>C142 Clause 15</td>
</tr>
<tr>
<td>Moonee Valley Waste Management Strategy (Moonee Valley City Council, 2008)</td>
<td>C134 Clause 12</td>
</tr>
<tr>
<td>Moonee Valley Water Strategy (Moonee Valley City Council, 2011)</td>
<td>C108 Clause 12 and 19</td>
</tr>
<tr>
<td>Mt Alexander Road Corridor Urban Design Guidelines (Tract Consultants Pty Ltd, 2011)</td>
<td>C102 Clause 11 and 15</td>
</tr>
<tr>
<td>Municipal Parking Strategy (Moonee Valley City Council, 2011)</td>
<td>C134 Clause 18</td>
</tr>
<tr>
<td>MV2040 Action Plan – Community Facilities (Moonee Valley City Council, 2018)</td>
<td>C193moon Clause 02 and 19</td>
</tr>
<tr>
<td>MV2040 Strategy (Moonee Valley City Council, 2018)</td>
<td>C193moon Clause 02; 11-13 and 15-19</td>
</tr>
<tr>
<td>North Essendon Activity Centre Built Form Guidelines (Moonee Valley City Council, 2012)</td>
<td>C117 Clause 02 and 11</td>
</tr>
<tr>
<td>North Essendon Activity Centre Structure Plan (Planisphere, 2011)</td>
<td>C117 Clause 02 and 11</td>
</tr>
<tr>
<td>Parking Permit Policy (Moonee Valley City Council, 2013)</td>
<td>C134 Clause 18</td>
</tr>
<tr>
<td>Review of HO precincts (David Helms Heritage Planning, 2011)</td>
<td>C109 Clause 15</td>
</tr>
<tr>
<td>Road Safety Plan (Moonee Valley City Council and Hennessy Services Pty Ltd, 2010)</td>
<td>C134 Clause 18</td>
</tr>
<tr>
<td>Steele Creek Linear Park Master Plan (Hansen Partnership Pty Ltd, 2007)</td>
<td>C112 Clause 12</td>
</tr>
<tr>
<td>Name of background document</td>
<td>Amendment number - clause reference</td>
</tr>
<tr>
<td>------------------------------------------------------------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>Urban Ecology Strategy (Moonee Valley City Council, 2014)</td>
<td>C193moon Clause 12</td>
</tr>
<tr>
<td>Walking and Cycling Strategy (Moonee Valley City Council, 2012)</td>
<td>C134 Clause 18</td>
</tr>
<tr>
<td>Waste and Resource Recovery Plan (Moonee Valley City Council</td>
<td>C193moon Clause 12</td>
</tr>
<tr>
<td>2014-2016)</td>
<td></td>
</tr>
<tr>
<td>Waste Management Plans – Guidelines for Planning Applicants</td>
<td>C207149moon Clause 02, and 12, and Schedule 20, Clause 37.08</td>
</tr>
<tr>
<td>(Moonee Valley City Council, 2011[8])</td>
<td></td>
</tr>
</tbody>
</table>
MOONEE PONDS
MPAC BUILT FORM STUDY | 28 OCT 2019 (REV G)
POSSIBLE BUILT FORM OUTCOMES USING A FLOOR AREA RATIO

OPTION D1

FAR
HEIGHT
GFA
MAX FAR
2,010 m²
3,408 m²
4.5 : 1
6 STOREYS

OPTION D2

FAR
HEIGHT
GFA
MAX FAR
2,040 m²
3,408 m²
4.5 : 1
6 STOREYS

OPTION D3

FAR
HEIGHT
GFA
MAX FAR
2,040 m²
3,408 m²
4.5 : 1
6 STOREYS

OPTION D4

FAR
HEIGHT
GFA
MAX FAR
2,030 m²
3,408 m²
4.5 : 1
6 STOREYS

OPTION D5

FAR
HEIGHT
GFA
MAX FAR
2,030 m²
3,408 m²
4.5 : 1
6 STOREYS

OPTION D6

FAR
HEIGHT
GFA
MAX FAR
2,040 m²
3,408 m²
4.5 : 1
6 STOREYS

The most likely use for this upper level is a commercial car park.

4 storeys will maintain FAR of 4.5:1.

This layout would suit all uses, the plan depth is kept deep to suit parking.

The FARs in bold are maximums for planning purposes.

Please refer to the council’s design guidelines for further information.
SITE ASSUMPTIONS & KEY POINTS

- PEDESTRIAN LINK THROUGH SITE
- LOWER BUILT FORM TO WESTERN SITE TO AVOID SHADOW IMPACT TO EXISTING NATURE STRIP ALONG MT. ALEXANDER ROAD
- WESTERN SITE LOWER HEIGHT MORE SUITED TO OFFICE/NON-RESIDENTIAL
- SOLAR CONTROL AND STREET WALL REQUIREMENTS FOR THE PRECINCT ARE CURRENTLY CONTRADICTING EACH OTHER, I.E. 8 STOREY STREET WALL ALONG MT. ALEXANDER RD INTERFACE WILL HAVE EXTENSIVE SHADOW IMPACT TO EXISTING NATURE STRIP
- STREET WALL HEIGHT TRANSITION ALONG PASCOVALE RD AND KELLLAWAY AVE. HIGHER BUILT FORM TOWARDS CORNER OF STREET
- FUTURE OPEN SPACE PROVIDED
- EAST SITE RESIDENTIAL TO FACE TOWARDS QUEENS PARK AND EXISTING RESIDENTIAL
- EAST RESIDENTIAL BUILDING BASED ON SUITABLE APARTMENT LAYOUT DIMENSIONS
  - RES1 FLOOR DEPTH UP TO APPROX 2.0M
- TYPICAL FLOOR HEIGHTS USED:
  - RESIDENTIAL: 2.1M
  - OFFICE: 4.0M
  - GROUND LEVEL: 4.5M
## SITE 1A

### CORNER PASCOVALE RD & KELLAWAY AVE

### BUILT FORM CONTROLS

<table>
<thead>
<tr>
<th></th>
<th>WEST</th>
<th>EAST</th>
<th>KEY PLAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANDATORY FAR</td>
<td>21% (WEST)</td>
<td>23% (EAST)</td>
<td></td>
</tr>
<tr>
<td>DISCRETIONARY HEIGHT</td>
<td>15 m (WEST)</td>
<td>15 m (EAST)</td>
<td></td>
</tr>
<tr>
<td>STREET WALL HEIGHT</td>
<td>25 m (WEST)</td>
<td>25 m (EAST)</td>
<td></td>
</tr>
<tr>
<td>SOLAR CONTROL</td>
<td>WINTER SOLSTICE TO</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MT ALEXANDER RD</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NATURE STRIP</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>SITE AREA</th>
<th>MAX GFA</th>
<th>SITE AREA</th>
<th>MAX GFA</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEST</td>
<td>1,654 m²</td>
<td>5,410 m²</td>
<td>1,674 m²</td>
<td>13,128 m²</td>
</tr>
<tr>
<td>EAST</td>
<td>4,674 m²</td>
<td>13,128 m²</td>
<td>20,211 m²</td>
<td>20,211 m²</td>
</tr>
</tbody>
</table>

### TYPICAL LOWER LEVELS

### TYPICAL UPPER LEVELS
SITE 2A SITE ASSUMPTIONS

EXISTING RESIDENTIAL

LOWER HEIGHT RESIDENTIAL TOWARDS EXISTING RESIDENTIAL INTERFACE

3M LANDSCAPED SETBACK

FUTURE OPEN SPACE ON CORNER FOR FOOTPATH

SUITABLE RETAIL, LOCATION TO LOWER, ENTRANCE FORM TO LOWER LEVELS

SLENDER UPPER LEVEL MASSING

EXISTING COMMERCIAL AND TALLER BUILT FORMS

EXISTING TALL TOWER

BUILT FORM CONTROLS

MANDATORY FAR: 2.5m (NORTH) & 4.1m (SOUTH)
DISCRETIONARY HEIGHT: 25m (NORTH) & 80m (SOUTH)
STREET WALL HEIGHT: 11m (NORTH) & 18m (SOUTH)
SOLAR CONTROL: N/A

TAYLOR ST / HOMER ST / EDDY ST

SITE ASSUMPTIONS & KEY POINTS

- WITHIN ACTIVITY CENTRE SO MIXED-USE APPROPRIATE
- LOWER HEIGHT TOWARDS RESIDENTIAL INTERFACE
- TALLER HEIGHTS AT SOUTH TOWARDS EXISTING TALL BUILT FORMS
- RESIDENTIAL LOCATED NORTH TOWARDS EXISTING RESIDENTIAL
- RETAIL (SUPERMARKET) AND OFFICES LOCATED SOUTH TOWARDS EXISTING COMMERCIAL
- 3M LANDSCAPED SETBACK ON GROUND ALONG GLADSTONE STREET
- 2M SETBACK ON GROUND ALONG HOMER STREET AND EDDY STREET
- FUTURE OPEN SPACE PROVIDED TO NW CORNER FOR SOLAR ACCESS
- PEDESTRIAN PRIORITY THROUGH LINK FOR CIRCULATION THROUGH SITE - INTRODUCE A FINER GRAIN TO PUBLIC REALM
- MASSING LENGTH AND WIDTH BASED ON SUITABLE APARTMENT LAYOUT DIMENSIONS
  - RBSI FLOOR DEPTH UP TO APPROX. 20M
  - OFFICE FLOOR DEPTH 20M - 20M
  - LENGTH OF UPPER LEVEL FLOOR PLATES KEPT UNDER 40M
- TYPICAL FLOOR HEIGHTS USED:
  - RESIDENTIAL: 3.1M
  - OFFICE: 4M
  - GROUND LEVEL: 4.8M
SITE 2A

TAYLOR ST / HOMER ST / EDDY ST

BUILT FORM CONTROLS  NORTH  SOUTH  KEY PLAN
MANDATORY FAR  2.5/NORTH, 6/SOUTH  SITE AREA  6,123 m²  SITE AREA  6,525 m²
DISCRETIONARY HEIGHT  39m (NORTH), 60m (SOUTH)  MAX GFA  21,228 m²  MAX GFA  42,056 m²
STREET WALL HEIGHT  11m  SITE AREA  6,525 m²
SOLAR CONTROL  N/A  GFA SHOWN  21,404 m²  GFA SHOWN  42,242 m²
FAR SHOWN  3.401  FAR SHOWN  4.601
HEIGHT  33m (111 ft)  HEIGHT  35m (115 ft)
SITE 2B SITE ASSUMPTIONS

MT ALEXANDER RD / HOMER ST / HALL ST

SITE ASSUMPTIONS & KEY POINTS

- FUTURE OPEN SPACE PROVIDED
- PEDESTRIAN THROUGH LINK FOR CIRCULATION THROUGH SITE - INTRODUCE A FINER GRAIN TO PUBLIC REALM
- LOWER BUILT FORM TO EASTERN SIDE TO AVOID SHADOW IMPACT TO EXISTING NATURE STRIP ALONG MT. ALEXANDER ROAD
- RETAIL LOCATED SOUTH TOWARDS EXISTING COMMERCIAL INTERFACES ALONG HOMER ST AND HALL ST
- WITHIN ACTIVITY CENTRE SO MIXED-USE APPROPRIATE
- 5M SETBACK ON GROUND ALONG HOMER STREET
- 5M SETBACK ON GROUND ALONG HALL STREET
- MASSING LENGTH AND WIDTH BASED ON SUITABLE APARTMENT LAYOUT DIMENSIONS
  - RES. FLOOR DEPTH UP TO APPROX. 20M
  - OFFICE FLOOR DEPTH 10M - 20M
  - LENGTH OF UPPER LEVEL FLOOR PLATES KEPT UNDER 40M
- TYPICAL FLOOR HEIGHTS USED:
  - RESIDENTIAL: 2.1M
  - OFFICE: 4M
  - GROUND LEVEL: 4.5M

BUILT FORM CONTROLS

MANDATORY FAR
- E:1
DISCRETIONARY HEIGHT
- 62m
STREET WALL HEIGHT
- 12-16m
SOLAR CONTROL
- N/A

KEY PLAN

PAGE 874
SITE 2B

MT ALEXANDER RD / HOMER ST / HALL ST

BUILT FORM CONTROLS

<table>
<thead>
<tr>
<th>REQUIREMENT</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANDATORY FAR</td>
<td>5:1</td>
</tr>
<tr>
<td>DISCRETIONARY HEIGHT</td>
<td>65m</td>
</tr>
<tr>
<td>STREET WALL HEIGHT</td>
<td>16-18m</td>
</tr>
<tr>
<td>SOLAR CONTROL</td>
<td>N/A</td>
</tr>
</tbody>
</table>

| SITE ACREAGE         | 10,208 m² |
| MAX. GFA             | 61,940 m² |
| GFA SHOWN            | 51,448 m² |
| FAR SHOWN            | 4.5E+4   |
| HEIGHT               | 5.0m (171.5 ft) |

KEY PLAN

TYPICAL LOWER LEVELS

TYPICAL UPPER LEVELS
SITE ASSUMPTIONS & KEY POINTS

- SITE AND LOCATION SUITABLE FOR SMALLER RESIDENTIAL
- NEAR LANEWAY ACCESS PROVIDED / REINSTATED
- 3 STOREY STREET WALL PROPOSED
- OPPORTUNITY FOR RETAIL TOWARDS HALL ST, HOWEVER AREA LIKELY TO BE IN SHADE OFTEN FROM TREES AND BUILDINGS TO NORTH
- LOWER HEIGHT RESIDENTIAL TOWER TOWARDS EXISTING CARPARK TO WEST
- 2M SETBACK ON GROUND ALONG HALL STREET
- MASSING LENGTH AND WIDTH BASED ON SUITABLE APARTMENT LAYOUT DIMENSIONS
  - NR1 FLOOR DEPTH UP TO APPROX 20M
  - OFFICE FLOOR DEPTH 20M - 40M
  - LENGTH OF UPPER LEVEL FLOOR PLATE KEPT UNDER 40M
- TYPICAL FLOOR HEIGHTS USED:
  - RESIDENTIAL: 2.1M
  - OFFICE: 4M
  - GROUND LEVEL: 4.2M
SITE 3A SITE ASSUMPTIONS

GLADSTONE ST / PRATT ST / YOUNG ST

SITE ASSUMPTIONS & KEY POINTS

- PEDESTRIAN PRIORITY THROUGH LINK FOR CIRCULATION THROUGH SITE - INTRODUCE A FINER GRAIN TO PUBLIC REALM
- FUTURE OPEN SPACE PROVIDED TO NORTH FOR SOLAR ACCESS
- WITHIN ACTIVITY CENTRE SO MIXED-USE APPROPRIATE
- 2M LANDSCAPED SETBACK ON GROUND ALONG GLADSTONE STREET
- 3M SETBACK ON GROUND ALONG YOUNG STREET
- LOWER BUILT FORM TO THE SOUTH ALONG GLADSTONE ST TO AVOID SOLAR IMPACT TO RESIDENTIAL INTERFACE (AS PER CLAUSE SS.04-0)
- HIGHER BUILT FORM TO THE NORTH
- MASSING LENGTH AND WIDTH BASED ON SUITABLE APARTMENT LAYOUT DIMENSIONS
  - RESIDENTIAL FLOOR DEPTH UP TO APPROX. 20M
  - OFFICE FLOOR DEPTH 25M - 20M
  - LENGTH OF UPPER LEVEL FLOOR PLATE KEPT UNDER 40M
- TYPICAL FLOOR HEIGHTS USED:
  - RESIDENTIAL 2.4M
  - OFFICE 4M
  - GROUND LEVEL: 4.5M

BUILT FORM CONTROLS

MANDATORY FAR 4.5 (NORTH) & 2.6 (SOUTH)
DISCRETIONARY HEIGHT 42m (NORTH) & 36m (SOUTH)
STREET WALL HEIGHT 11m
SOLAR CONTROL GLADSTONE ST RESIDENTIAL INTERFACES

KEY PLAN
SITE 3A

GLADSTONE ST / PRATT ST / YOUNG ST

**BUILT FORM CONTROLS**

- **MANDATORY FAR**: 4.0 (NORTH), 2.0 (SOUTH)
- **DISCRETIONARY HEIGHT**:
  - NORTH: 42 m
  - SOUTH: 35.5 m
- **STREET WALL HEIGHT**: 11 m
- **SOLAR CONTROL**: GLADSTONE ST RESIDENTIAL

<table>
<thead>
<tr>
<th></th>
<th>NORTH</th>
<th>SOUTH</th>
<th>KEY PLAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>SITE AREA</td>
<td>9,564 m²</td>
<td>4,520 m²</td>
<td></td>
</tr>
<tr>
<td>MAX GFA</td>
<td>44,752 m²</td>
<td>14,556 m²</td>
<td></td>
</tr>
<tr>
<td>GFA SHOWN</td>
<td>4,451 m²</td>
<td>14,281 m²</td>
<td></td>
</tr>
<tr>
<td>FAR SHOWN</td>
<td>4,451 m²</td>
<td>2,861 m²</td>
<td></td>
</tr>
<tr>
<td>HEIGHT</td>
<td>40 m (131 ft)</td>
<td>30 m (98 ft3)</td>
<td></td>
</tr>
</tbody>
</table>

**TYPICAL LOWER LEVELS**

**TYPICAL UPPER LEVELS**
SITE 3B SITE ASSUMPTIONS

GLADSTONE ST / YOUNG ST

SITE ASSUMPTIONS & KEY POINTS

- LOWER BUILT FORM TO THE SOUTH ALONG GLADSTONE ST TO AVOID SOLAR IMPACT TO RESIDENTIAL INTERFACE (AS PER CLAUSE 55.04-C)
- TALLER BUILT FORM TO THE NORTH
- 3M LANE-SIZED SETBACK ON GROUND ALONG GLADSTONE ST
- 3M SETBACK ON GROUND ALONG YOUNG STREET
- FUTURE OPEN SPACE PROVIDED TO WESTERN SIDE FOR SOLAR ACCESS
- MASSING LENGTH AND WIDTH BASED ON SUITABLE APARTMENT LAYOUT DIMENSIONS
  - RESIDUAL FLOOR DEPTH UP TO APPROX. 20M
  - OFFICE FLOOR DEPTH 20M - 25M
  - LENGTH OF UPPER LEVEL FLOOR PLATES KEPT UNDER 40M
- TYPICAL FLOOR HEIGHTS USED:
  - RESIDENTIAL: 3.5M
  - OFFICE: 4.5M
  - GROUND LEVEL: 4.2M

BUILT FORM CONTROLS

MANDATORY FAH 4.0m (NORTH) & 2.6m (SOUTH)
DISCRETIONARY HEIGHT 4.2m (NORTH) & 3.6m (SOUTH)
STREET WALL HEIGHT 1.1m
SOLAR CONTROL GLADSTONE ST RESIDENTIAL INTERFACES

KEY PLAN
SITE 4 SITE ASSUMPTIONS

SITE ASSUMPTIONS & KEY POINTS

- Future development should respond to heritage character of Puckle Street
- Site selected due to its larger size in Precinct 4 and non-heritage facade
- Precinct 4 requires mandatory height limit rather than far
- Spring Equinox solar control to southern footpath of Puckle Street
- Encourage party-walling between buildings
- Ground floor appropriate for retail given location along Puckle Street, residential above
- Typical floor heights used:
  - Residential: 2.1m
  - Office: 4m
  - Ground level: 4.5m

BUILT FORM CONTROL

- MANDATORY FAR: N/A
- MANDATORY HEIGHT: 6m
- STREET WALL HEIGHT: 6m
- SOLAR CONTROL:
  - Spring Equinox
  - Puckle Streets
  - Southern Footpath

KEY PLAN

[Diagram showing site assumptions and key points related to the site's layout and design considerations.]
34-46 Holmes Rd

SITE ASSUMPTIONS & KEY POINTS

- SITE IS SELECTED BASED ON POTENTIAL FUTURE REDEVELOPMENT: LARGER SITE AND CORNER SITE
- RETAIL USE ON GROUND, APARTMENTS ABOVE
- REDUCED RESIDENTIAL LENGTH ALONG SYDENHAM ST FOR ESCAPE DISTANCES
- SPRING EQUINOX SOLAR CONTROL TO SOUTHERN FOOTPATH OF HOLMES ROAD
- POTENTIAL FOR REAR OF SYDENHAM ST FRONTAGE TO BECOME DOUBLE STOREY RESIDENTIAL IF RETAIL AREA NOT REQUIRED ON GROUND FLOOR
- TYPICAL FLOOR HEIGHTS USED:
  - RESIDENTIAL: 3.1m
  - OFFICE: 4m
  - GROUND LEVEL: 4.8m

SITE 5 SITE ASSUMPTIONS

BUILT FORM CONTROLS

MANDATORY FAR: 2:1
DISCRETIONARY HEIGHT: 10m
STREET WALL HEIGHT: 11.15m
SOLAR CONTROL: N/A
**SITE 5 OPTION**

**BUILT FORM CONTROLS**

- MANDATORY FAR: 2:1
- DISCRETIONARY HEIGHT: 16 m
- STREET WALL HEIGHT: 11-15 m
- SOLAR CONTROL: N/A

**SITE AREA**: 1,740 m²
**MAX GFA**: 6,250 m²

- GFA SHOWN: 5,186 m²
- FAR SHOWN: 2.50:1
- HEIGHT: 14 m (4 LVLs)

**KEY PLAN**

---

**34-46 HOLMES RD**

**TYPICAL LOWER LEVELS**

**TYPICAL UPPER LEVELS**
SITE 6 SITE ASSUMPTIONS

SITE ASSUMPTIONS & KEY POINTS

- SITE IS SELECTED BASED ON POTENTIAL FUTURE REDEVELOPMENT. AS MOST LARGER SITES HAVE BEEN RECENTLY DEVELOPED, THE SCENARIO ASSUMES THAT SMALLER SITES ARE COMBINED FOR POTENTIAL SZABLE DEVELOPMENT

- MULTIPLE RESIDENTIAL BUILDINGS IN AREA SO RESIDENTIAL USE APPROPRIATE

- SITE IS SITUATED BETWEEN TWO LOW-RISE RESIDENTIAL BUILDINGS (6 AND 7 STOREYS), AND OPPOSITE A 7 STOREY RESIDENTIAL BUILDING

- MASSING LENGTH AND WIDTH BASED ON SUITABLE APARTMENT LAYOUT DIMENSIONS
  - RESI FLOOR DEPTH UP TO APPROX. 20M
  - OFFICE FLOOR DEPTH 25M - 30M
  - LENGTH OF UPPER LEVEL FLOOR PLATE KEPT UNDER 40M

- TYPICAL FLOOR HEIGHTS USED:
  - RESIDENTIAL: 2.1M
  - OFFICE: 4M
  - GROUND LEVEL: 4.8M

BUILT FORM CONTROLS

MANDATORY FAR 4:1
DISCRETIONARY HEIGHT 55m
STREET WALL HEIGHT 12m
SOLAR CONTROL WINTER SOLSTICE TO FUTURE ADJACENT OPEN SPACE
SITE 7A SITE ASSUMPTIONS

541 MT ALEXANDER RD

SITE ASSUMPTIONS & KEY POINTS

- WITHIN ACTIVITY CENTRE SO MIXED-USE APPROPRIATE
- FUTURE OPEN SPACE PROVIDED WITH ACCESS OFF MT. ALEXANDER ROAD
- OPEN SPACE TOWARDS NORTH FOR SOLAR ACCESS
- MIXED-USE: RETAIL ON GROUND LEVEL AND APARTMENTS ABOVE
- SURROUNDING AREA ALONG MT. ALEXANDER RD IS PRIMARILY RETAIL
- MASSING LENGTH AND WIDTH BASED ON SUITABLE APARTMENT LAYOUT DIMENSIONS
  - REQ FLOOR DEPTH UP TO APPROX 3.0M
  - OFFICE FLOOR DEPTH 2.0M - 2.5M
  - LENGTH OF UPPER LEVEL FLOOR PLATE KEPT UNDER 40M
- TYPICAL FLOOR HEIGHTS USED:
  - RESIDENTIAL: 3.1M
  - OFFICE: 4M
  - GROUND LEVEL: 4.5M

BUILT FORM CONTROLS

|MANDATORY FAR| 4.5:1 |
|DISCRETIONARY HEIGHT| 28m |
|STREET WALL HEIGHT| 23m |
|SOLAR CONTROL| N/A |

KEY PLAN
SITE ASSUMPTIONS & KEY POINTS

- Within Activity Centre so Mixed Use Appropriate - Nearby other commercial so office use appropriate.
- Pedestrian through block access provided - Introduce finer grain to public realm.
- Winter Solstice Solar control to existing nature strip along Mt Alexander Rd.
- Spring Equinox Solar control to southern footpath of Alexandra Ave.
- Lower built form towards south corner to reduce overshadowing impact.
- Massing length and width based on suitable apartment layout dimensions.
  -Residential floor depth up to approx. 20m.
  -Office floor depth 25m - 35m.
  -Length of upper level floor plates kept under 40m.
- Typical floor heights used:
  -Residential: 2.1m.
  -Office: 4.5m.
  -Ground level: 4.5m.

BUILT FORM CONTROLS

<table>
<thead>
<tr>
<th>Control</th>
<th>Height (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandatory FAR</td>
<td>4.5</td>
</tr>
<tr>
<td>Discretionary height</td>
<td>58</td>
</tr>
<tr>
<td>Street wall height</td>
<td>13</td>
</tr>
<tr>
<td>Solar control</td>
<td>Winter Solstice to Mt Alexander Rd &amp; Nature Strip</td>
</tr>
</tbody>
</table>

KEY PLAN
SITE 8B SITE ASSUMPTIONS

ALEXANDRA AVE / MCPHERSON ST / COATES ST

SITE ASSUMPTIONS & KEY POINTS

- Apartments / Serviced Apartments throughout
- No additional overshadowing above street, wall height to future open space, therefore northern built form lower in height / greater setbacks
- Spring Equinox solar control to southern footpath of Alexandra Ave.
- Pedestrian through block access provided - Introduce finer grain to public realm
- Massing length and width based on suitable apartment layout dimensions
  - Resi floor depth up to approx. 20m
  - Office floor depth 20m - 26m
  - Length of upper level floor plates kept under 40m
- Typical floor heights used:
  - Residential: 3.1m
  - Office: 4m
  - Ground level: 4.5m

BUILT FORM CONTROLS

MANDATORY F/P 2:5:1
DISCRETIONARY HEIGHT 55m
STREET WALL HEIGHT 12m
SOLAR CONTROL Winter solstice to future open space on McPherson St

KEY PLAN
SITE ASSUMPTIONS & KEY POINTS

- Within activity centre so mixed-use appropriate
- Pedestrian priority through link for circulation through site - introduce a finer grain to public realm
- Lower built form to the south along Dean St to avoid solar impact to residential interface (as per Clause 55.04-S)
- Taller built form to the north
- 2.5m setback on ground along Alexandra Ave.
- 2m setback on ground along Dean Street
- Residential on eastern side closer to racing track development
- Commercial/office on western side closer to junction / existing commercial
- Massing length and width based on suitable apartment layout dimensions
  - Reg floor depth up to approx. 20m
  - Office floor depth 20m - 25m
  - Length of upper level floor plates kept under 40m
- Typical floor heights used:
  - Residential: 2.1m
  - Office: 4m
  - Ground level: 4.5m
SITE ASSUMPTIONS & KEY POINTS

- Lower built form to the south along Dean St to avoid solar impact to residential interface (as per Clause 55.04-5).
- Taller built form to the north.
- Pedestrian through block access provided - introduce finer grain to public realm.
- 2.5m setback on ground along Alexandra Ave.
- 2m setback on ground along Dean Street.
- Massing length and width based on suitable apartment layout dimensions:
  - Resi floor depth up to approx. 20m
  - Office floor depth 20m - 30m
  - Length of upper level floor plates kept under 40m.
- Typical floor heights used:
  - Residential: 3.1m
  - Office: 4m
  - Ground level: 4.5m
ATTACHMENTS – ORDINARY COUNCIL MEETING

ITEM 10.5 - ATTACHMENT L

MASSING OVERALL EXISTING - LOOKING SOUTH WEST

[Diagram showing a 3D perspective of a cityscape, looking south west]
MASSING OVERALL PROPOSED - LOOKING NORTH EAST
MASSING OVERALL PROPOSED - LOOKING SOUTH WEST
MPAC to 2040 - Moonee Ponds Activity Centre

Informal Consultation Summary Report

November, 2019
1. Executive Summary

The draft MMAC for 2022 – Moore Parkland Activity Centre Local Plan (Local Plan) is a strategic document outlining the long term vision for the Moore Parkland Activity Centre (MPAC). In considering the expected future growth of the MPAC, the Local Plan makes recommendations for how development should look and function, encouraging better pedestrian vehicle access and movement in more resilient environments and new driver more affordable housing. The land plan has been developed in line with the MPACDFP strategy (2019/2024). Council's long term plan to achieve a healthy city that is live, working, connected, green and beautiful.

The comprehensive Local Plan for the activity centre is supported by a series of background documents and a suite of planning controls. These draft elements form an initial phase of environmental consultation, which took place from 23 April 2019 to 17 May 2019, where the community was invited to provide feedback and have their say.

The extensive technical consultation took place in a variety of ways:

- 3,349 submissions were received on local property owners and registered in MMAC.
- 738 visits to the MMAC to the DAIRY Cowell's Tray website.
- Information was posted to Council’s corporate website and Facebook page.
- 101 total downloads of documents from the Tray Cowell website.
2. Introduction

2.1 Background

Mooroolbark Activity Centre is classified as a Major Activity Centre by Greater Dandenong Council, adopted in its Structure Plan for the centre in 2006 and subsequently updated in 2012. Future development of the Structure Plan is subject to the approval of the Minister for Planning under the applicable planning scheme. The current Plan includes a number of key elements for the development of the Mooroolbark Activity Centre, including the provision for future development of the centre.

As the development of the NNAC Project is progressing, Council is reviewing the AMAC Plan to ensure consistency and alignment with the updated Plan and associated documents before Council approves the updated Plan for adoption.

ATTACHMENT M

3. Consultation Approach

3.1 What we consulted on

- Draft Plan
- Report
- Schedule 1 to Schedule 1.01 (Activity Centre Zone)
- Schedule 2 to Schedule 1.09 (Parking Overlay)

Seven background documents (these documents offer more details of the vision for NNAC) give a comprehensive understanding of how the activity centre will function and look.

- Activity Centre Zone
- Parking Overlay
- NNAC District Plan
- NNAC Development and Public Space
- NNAC Affordable Housing
- NNAC Employment and Workforce
- NNAC Transport

The objectives of the informal consultation process were:
- To seek community feedback on the draft Plan, background documents and proposed planning controls;
- To work with the public to ensure their concerns and aspirations are consistently understood and considered;
- To utilise the findings from this public engagement to further develop the local Plan and associated documents before Council approves the updated Plan for adoption.
3.1 What we consulted on

An overview of the 8 BMPAC precincts we consulted on are as follows:

Centralised recommendations:
- Introducing a suite of parking controls allowing the community with virtually all development in the area while still encouraging consultation and avoiding design
- Introducing vehicular form control for 3D identified sites (see Table 2, Table 1) in order to deliver thorough.
- Parking, affordable housing and public open space.
- Creating a BMPAC form which includes a majority of traffic.
- The periphery of the activity centre.
- The form which the 3D and 3D4 to ensure a safer pedestrian environment.
- Introducing pedestrian parking spaces and ensuring a mix of urban and suburban design.
- Incorporating a retail and dining area for urban design.
- Introducing pop-up events, lighting and other design elements.

3.2 How we engaged

To ensure the community’s recommendations are incorporated and considered, the following engagement methods were used to create awareness of the project:
- Council’s website and Corporate website
- Social media
- Public notification
- Mail out

Council’s website was updated to raise awareness for and inform community members of the consultation project. The BMPAC Plan was promoted in the ‘Morningside Activity Centre’ section and included a link to the four key pages and details on the scheduled drop-in sessions.

Two posts were made to Council’s Facebook page at the beginning of the consultation period (12 April) and one went into the program (20 April).

The field consultants program was advertised in a banner used in the ‘Morningside Activity Centre’ section.
3.2 How we engaged

Local residents, landowners, key stakeholders and other community members were given the opportunity to provide feedback via the following engagement mechanisms:

- Drop-in Sessions
- Online Survey
- Written Communications (including survey responses)

Drop-in Sessions
Two drop-in sessions were held during the consultation program: a morning session on the 29th April 2019, and an evening session on the 1st May 2019. These sessions took place at the Gleadstar Arcade and were open to the public to drop in, share their ideas, and speak to Council officers about the Local Plan.

The information presented at these drop-in sessions included:
- Hard copies of the draft local Plan
- The suite of supporting documents: Built Form, Affordable Housing, Streetview and Public Spaces, Transport, Public Open Space, Wind, Employment Inner Space
- Schedule A to the Activity Centre Zone
- Parking Guidelines
- MMAC property map
4. Consultation Outcomes

The informal consultation took place from 23 April 2019 to 17 May 2019. Engagement platforms below were undertaken during this period of time.

<table>
<thead>
<tr>
<th>Platform</th>
<th>Communication</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Website</td>
<td>• <a href="https://www.rcv.saga.aata.org/">https://www.rcv.saga.aata.org/</a></td>
<td>• Realise printed plans of the Local Plan</td>
</tr>
<tr>
<td></td>
<td>• Open for 8 weeks</td>
<td>• 12 open-ended survey questions</td>
</tr>
<tr>
<td></td>
<td>• Written submissions</td>
<td>• Receive written submissions</td>
</tr>
<tr>
<td></td>
<td>• Drafts of the consultation report (22 April)</td>
<td>• Distribute to the Year Two proposals</td>
</tr>
<tr>
<td></td>
<td>• Project information</td>
<td>• General information to the project</td>
</tr>
<tr>
<td></td>
<td>• Regular updates of the project</td>
<td>• Information to the project (22 April)</td>
</tr>
<tr>
<td>Facebook pages</td>
<td>• <a href="https://www.facebook.com/rcv.saga.aata.org">https://www.facebook.com/rcv.saga.aata.org</a></td>
<td>• Regular updates of the project</td>
</tr>
<tr>
<td></td>
<td>• The public was made aware of the consultation period (22 April)</td>
<td>• 24-hour public consultation</td>
</tr>
<tr>
<td></td>
<td>• Details of engagement methods</td>
<td>• 9 comments</td>
</tr>
<tr>
<td>Written submissions</td>
<td>• Open at any time during the informal consultation period</td>
<td>• 20 written submissions (excluding survey responses) out of email and post</td>
</tr>
<tr>
<td></td>
<td>• 20 written submissions (excluding survey responses)</td>
<td>• 526 written submissions distributed to recipients and acceptors of proposals within the MHCC boundary</td>
</tr>
<tr>
<td></td>
<td>• Request for changes or review</td>
<td>• Significant request for changes or review</td>
</tr>
<tr>
<td></td>
<td>• Request for further consultation</td>
<td>• Request for further consultation</td>
</tr>
<tr>
<td></td>
<td>• Objections to project</td>
<td>• Objections to project</td>
</tr>
</tbody>
</table>

A single submission allows the reader to more ideas, though such submissions will be ignored. The key themes are in accordance with the themes in the draft Master Plan of the World Bank Group. The five themes in the draft Master Plan (see chapter 2) are the right for more information of submissions related to specific themes.
4. Consultation Outcomes

Among all the submissions, the following themes have emerged to the most extent.

General Support for Vision

Mostly speaking, submissions support the overall thrust of the submission, provided the design and associated costs are lower, and approvals are high and approved works are high, and in particular, and high approval costs are high, and in particular, the support for the vision to make MPAC safer for pedestrians. Submissions are supportive of public transport, high approval costs are provided. There is an end list of high transport costs.

More feedback received is summarised in the following three categories.

More what you liked:

- Lowering the pedestrian crossing heights along sections of the MPAC, including: Gladesville Street, Young Street and Taylor Street.
- Enhancing the existing access to 15 meters to adjacent street with street with height that response to individual pedestrian.
- The proposed 6 am access control.
- The introduction of decorative pedestrian pathways as a means of providing continuity to the community regarding the scale of developments, whilst ensuring pedestrian safety and awareness.
- The implementation of additional safety measures for individuals living in new developments.
- The initiation of an informal housing development.

Key concerns raised:

- The scale of proposed height limits.
- Site overheating and air pollution levels.
- Concerning the amenity of existing developments.
- NRMA controls for a section of sites may need to be revised.

4. Consultation Outcomes

Access & Movement

Here's what you liked:

- The proposed separate bicycle lanes for M1 Alexander Road and Anzac Vale Road.
- The implementation of pedestrian crossings on M1 Alexander Road.
- The provision of new public open space at the McEwin site.
- Streetworks enhancement works on main MPAC including the upgrading of pedestrian crossings and voice amplification.
- The provision of new public open space at the proposed McEwin site.

Key concerns raised:

- The location of the new street car parking.
- Traffic volume and flow.
- Designing the MPAC road network to be safe, multi-modal and efficient.
- Assess and demonstrate at the McEwin Road junction level crossing.
- Cycle safety and lack of infrastructure.
- Reduction of speed limits.

Streetworks & Open Space

Here's what you liked:

- The proposed separate bicycle lanes for M1 Alexander Road and Anzac Vale Road.
- The implementation of pedestrian crossings on M1 Alexander Road.
- The provision of new public open space at the McEwin site.
- Streetworks enhancement works on main MPAC including the upgrading of pedestrian crossings and voice amplification.
- The provision of new public open space at the proposed McEwin site.

Key concerns raised:

- The overall location of the new street car parking.
- The existing location of the street car parking along M1 Alexander Road (Section 7).
5.1 How we have responded

In response to the feedback we received, we did a further review of all the documents and undertook further testing of the planning controls.

In addition to the key changes outlined below, we have also updated the Waste Management Plans – Guidelines for Planning Applicants (revised) advised by Council on 8 November 2018 to align with the comprehensive transport review of the centre. This will ensure the movement of waste is not creating a waste problem. Notwithstanding the intended functions of each street and laneway in MPAC, the updated Waste Management Plans – Guidelines for Planning Applicants is also intended to be introduced to the planning scheme as a background document.

### MPAC: Streetscapes and Public Spaces

<table>
<thead>
<tr>
<th>Change</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modification to concept plans and site elements to reflect changes made by the MPAC transport study (excavation, access, and safety)</td>
<td>Provides improved visibility for particular streets and activity centre as a whole</td>
</tr>
<tr>
<td>Additional parking provisions for access to the site</td>
<td>Provides improved visibility for particular streets and activity centre as a whole</td>
</tr>
</tbody>
</table>

### MPAC: Affordable Housing

<table>
<thead>
<tr>
<th>Change</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved strategic plan for affordable housing, including new design for affordable housing units</td>
<td>Provides improved strategic plan for affordable housing, including new design for affordable housing units</td>
</tr>
</tbody>
</table>

### MPAC: Wind

<table>
<thead>
<tr>
<th>Change</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhanced wind mitigation measures to reduce noise and visual impact</td>
<td>Enhanced wind mitigation measures to reduce noise and visual impact</td>
</tr>
<tr>
<td>Improved design for affordable housing units</td>
<td>Improved design for affordable housing units</td>
</tr>
</tbody>
</table>

### MPAC: Affordable Housing

<table>
<thead>
<tr>
<th>Change</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved design for affordable housing units</td>
<td>Improved design for affordable housing units</td>
</tr>
<tr>
<td>Enhanced wind mitigation measures to reduce noise and visual impact</td>
<td>Enhanced wind mitigation measures to reduce noise and visual impact</td>
</tr>
</tbody>
</table>

### MPAC: Affordable Housing

<table>
<thead>
<tr>
<th>Change</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved design for affordable housing units</td>
<td>Improved design for affordable housing units</td>
</tr>
<tr>
<td>Enhanced wind mitigation measures to reduce noise and visual impact</td>
<td>Enhanced wind mitigation measures to reduce noise and visual impact</td>
</tr>
</tbody>
</table>
5.1 How we have responded

**MPAC: Transport**

**Change**
- Attachment moves, resulting in a new document.

**Notation**
- Provides a more accessible document focusing on key transport recommendations, aligning with development priorities.

**Further information**
- Parking and design changes requested.
- Further changes will be made to the public transport design.
- Public transport changes will be made to the public transport design.

**Rationale**
- Further information is needed to ensure better accessibility for pedestrians and cyclists.

---

**MPAC: Transport (continued)**

**Change**
- Further discussion and details to clarify the importance of streets and pedestrian facilities, including minor modifications to parking design issues. Access to the city centre and major access points for passengers.

**Notations**
- Aligns to development priorities and design requirements to ensure better accessibility for pedestrians and cyclists.

---

**MPAC: Built Form**

**Change**
- Further clarity and provides a consistent response to the issues raised by&Bull Farm in the item.

**Rationale**
- Further analysis and provides a consistent response to the issues raised by&Bull Farm in the item.

---

**MPAC: Built Form (continued)**

**Change**
- Minor updates to proposed built form.

**Rationale**
- Aligns the design for MPAC and ensures clarity.

---

*Note: Further details and considerations are provided in the full document.*
### 5.1 How we have responded

#### MPAC: Public Open Spaces

<table>
<thead>
<tr>
<th>Change</th>
<th>Referenced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural changes to the document. Other updates to all sections (excluding maps) to line up with changes from the VSPC, Built Form and MPAC. Streamlined and Reformulated Public Space documents.</td>
<td>Provides consistency and improved understandability</td>
</tr>
</tbody>
</table>

#### MPAC: Employment and Floor Space

<table>
<thead>
<tr>
<th>Change</th>
<th>Referenced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor updates to the document.</td>
<td>Sources of forecast are consistent throughout the document</td>
</tr>
</tbody>
</table>

#### Activity Centre Zone

<table>
<thead>
<tr>
<th>Change</th>
<th>Referenced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Updates to align with the relevant recommendations of all background reports. For example:</td>
<td>Reforms to affordable housing uplift. Based on the VSPC, Built Form and MPAC. Affordable Housing documents</td>
</tr>
<tr>
<td>Additional of suitable access facilities based on the MPAC.</td>
<td>Provides consistency and ensures that relevant recommendations are reflected in planning proposals.</td>
</tr>
</tbody>
</table>

#### Parking Overlay

<table>
<thead>
<tr>
<th>Change</th>
<th>Referenced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiently reflects the recommendations for parking rates and guidelines of the MPAC.</td>
<td>Transport document</td>
</tr>
</tbody>
</table>
5.1 How we have responded

The following maps are extracts of maps from the MNAC Draft Plan document and show the changes to FPA and building heights across the activity centres.

Informed Consultation Version

Final Version

---

**For Proposed buildings/heights see Technical Reference Document.**

---

**For Proposed buildings/heights see Technical Reference Document.**