Contents

1.0 Introduction .............................................................................................................. 5
  1.1 Purpose of this report .......................................................................................... 6
  1.2 Scope of this report ............................................................................................ 7
  1.3 3D modelling methodology and assumptions ...................................................... 8
      DDO and preferred models ..................................................................................... 8
      Case study selection .............................................................................................. 10
      Assumptions .......................................................................................................... 11
      Limitations ............................................................................................................. 11
  1.4 Operation of the planning controls .................................................................. 12
      Aspects of the planning controls Council supports ............................................. 12
      Elements of the planning controls which require further refinement ............... 12

2.0 Creating distinctive neighbourhoods with diverse built form typologies .......... 14
  2.1 Cityscape, scale and legibility .......................................................................... 16
      Contributing to a varied inner city skyline ............................................................ 16
      Creating a series of places through distinct built form .................................... 18
  2.2 Urban structure ................................................................................................... 24
      Overall .................................................................................................................. 24
      City block structure and street network .............................................................. 26
      Locations for landmarks, nodes and gateways .................................................. 28
  2.3 Delivering diverse scales of development and built form typologies .......... 30
      Providing further guidance on built form typologies and character .................. 30
      Ability of building envelopes, FAR and FAR to deliver diverse typologies ......... 32
      Promoting mid-rise development ........................................................................ 38
      Tower podiums ..................................................................................................... 46

3.0 Creating a high quality, high amenity public realm .................................... 50
      Street wall heights ............................................................................................... 50
      Street walls - technical issues .............................................................................. 52
      Building to side and rear boundaries on narrow lots .......................................... 54
      Flooding and the need for raised floor levels ....................................................... 56
      Site coverage ....................................................................................................... 57

4.0 Promoting high quality buildings ................................................................. 58
      Design excellence ............................................................................................... 58
      Heritage and character buildings ........................................................................ 59

5.0 Summary of recommendations .................................................................. 60

6.0 Appendix 1. Built form modelling assumptions ........................................... 63
Employment Precinct
Wirraway
Sandridge
Montague
CBD

Figure 1. Fishermans Bend Precincts
1.0 Introduction

Fishermans Bend presents a unique opportunity to develop a new city that will home to 80,000 people and 80,000 jobs by 2050.

Planning for Fishermans Bend must set the right groundwork for realising the Vision and creating a lasting positive legacy for future generations.

The release of the draft Fishermans Bend Framework and Amendment GC81 is a critical step in the planning and delivery of Australia’s largest urban renewal Green Star community.

As outlined in its 13 December 2017 adopted submission, the City of Port Phillip believes the overall intent of the draft Framework and Amendment GC81 is sound and on the right path to delivering the endorsed Vision for Fishermans Bend.

However, Council submits there are some key changes which must be made to the Framework and planning scheme controls to develop a comprehensive approach to urban design to achieve the Vision.

Council is seeking some refinements to policy and spatial components of the Framework — to ensure an integrated plan that delivers quality urban design and place outcomes.

This includes:

- **Getting the urban structure right.** The Framework needs to further embed the structuring elements of place; core retail areas, community hubs, open spaces, and key streets and lanes and public transport, and integrate these elements to support functional and liveable neighbourhoods.

- **Placing greater emphasis on design quality.** The Framework makes limited mention of quality design. Conversely, Council considers that the design quality of buildings and the public realm as fundamental to creating a liveable, high density place.

This Report has been prepared by City of Port Phillip officers. While it is aligned to, and builds on the position endorsed by Council on 13 December 2017, the Report itself has not been specifically endorsed by Council.

As a result, references to the Council throughout relate to the view of the City of Port Phillip rather than expressly an endorsed, specific view of the Port Phillip City Council.

The report documents and tests the refinements Council is seeking to the draft Framework and planning controls to better define the future character of Fishermans Bend and its precincts, enhance liveability, encourage diverse building typologies and enhance the operation of the planning controls which implement it.
1.1 Purpose of this report

This report is consistent with and supplements Council’s adopted submission of December 2017.

Council’s submission identified a number of areas that required further testing.

The purpose of this report is to undertake that testing and more specifically to test:

1. Whether the proposed planning controls create the urban structure and built form which achieves the:
   - preferred future character identified for precincts and their sub-precincts (areas)
   - range of built form typologies sought for Fishermans Bend
   - high quality built form and public realm / streets.

2. The workability of the planning controls (and where possible, recommends solutions).

3. Council’s proposed key spatial changes to the Framework / planning controls such as new open space, building heights and the location of new streets and lanes.

This report focusses on the three precincts of Fishermans Bend located within the City of Port Phillip, Montague, Sandridge and Wirraway (see Figure 1).
1.2 Scope of this report

This report assesses urban design and built form strategies in the draft Framework and their translation into proposed built form controls.

Figure 2 outlines the document structure.

Figure 2. Document structure
1.3 3D Modelling methodology and assumptions

DDO and preferred models

To inform its position, Council has prepared two built form models based on different scenarios. They were prepared between October 2017 and March 2018.

1. DDO Model

The first is a model based on the draft Framework and proposed planning controls. This model is referred as the DDO model (see Figure 3).

It is a basic extrusion of the building envelopes of the draft Framework and proposed planning controls. Floorplate assumptions were also applied to create realistic building envelopes (see Appendix).

2. Council’s Preferred Outcome model

The second model is based on Council’s preferred outcomes (see Figure 4).

This model encapsulates and tests the outcomes and changes requested in Council’s endorsed submission, including changes to public open space, community infrastructure and laneways which would then inform changes to the planning controls/policy.

Figure 3. An example of street block from the DDO model

Figure 4. The same block remodelled in Council’s Preferred Outcome model

A building envelope is a three dimensional volume that defines the outermost part of a site that the building can occupy.
Differences between Council’s models and other 3D models

A key difference between the two Council models and the model produced as part of the development of the Urban Design Strategy, is that the Council models illustrate the maximum achievable building envelopes (up to the discretionary height limit, assuming FAR and FAU), and not the built form that can be achieved through the FAR alone.

In this way, the model shows the FAR, plus the potential for FAU and unlimited commercial development as per the exhibited Amendment 2.

Summary of methodology

The basic methodology used to develop the models was to:

1. Extrude building envelopes based on existing title boundaries and streets and new street blocks created by new streets and lanes shown in the draft Framework.
2. Apply the proposed planning controls (such as maximum building heights, minimum side and rear setbacks and maximum street walls) to create maximum building envelopes.
3. Apply maximum and minimum building widths to show realistic tower and building envelopes.
4. Test the potential impacts of overshadowing, FAR and FAU and other built form outcomes on selected sites.
5. Develop an alternative model based on Council’s preferred block sizes, streets/lanes, building heights. Extrude these sites into building envelopes and apply preferred maximum tower and building widths.

To develop Council’s preferred outcome, in some cases, options were developed to test various built form elements, for example, a range of street wall heights, upper level setbacks, overall building heights and building typologies.

6. Test proposed changes to community infrastructure hubs, public open space and overshadowing controls and their impacts on FAR and FAU and other built form outcomes on selected sites.
7. Recommend changes to the draft Framework and proposed controls.

2 Noting that the Minister now proposes to remove the ability for unlimited commercial development.
Case study selection

Council undertook testing of selected street blocks across the three precincts (see Figure 5).

The entire area of Fishermans Bend was not modelled due to the large number of sites, complexities of ownership and time limitations.

Two levels of analysis were undertaken:

• Built form modelling to understand the building envelopes and any proposed changes to them
• Detailed FAR and FAU modelling to understand the floor area and built form that could be produced. The FAR and FAU was modelled to the maximum building envelope to the discretionary height limit.

Noting FAR and FAU was not calculated for all sites where the building envelopes were tested.

The case studies were selected based on the following criteria:

• A sample from each precinct
• A mix of Core and Non-Core Areas
• Different building heights
• Different owners / subdivision and potential for site consolidation
• Different character / expected typologies
• Areas where Council’s spatial changes were proposed
• Areas affected by the potential overshadowing of public open space.

Figure 5. Street blocks in Fishermans Bend modelled by Council
**Assumptions**

To ensure as much alignment as possible with the 3d modelling used to inform the Fishermans Bend Urban Design Strategy (UDS), Council’s modelling adopted the assumptions in the UDS as follows:

- Table 14: ‘Built form assumptions in 3d testing’
- Table A.3 Preferred housing mix
- Definitions of low, medium and high-rise in Figure 43
- The DDO model uses the proposed mandatory and discretionary heights, side and rear setbacks and street walls from the planning controls in GC81. Where a discretionary height applies, buildings in the model were modelled to that height.

Cadastre, aerial photographs and rates data was used to inform the modelling.

A full list of the assumptions is contained in the Appendix.

**Limitations**

This report does not test the potential outcomes of FAU in terms of capacity or the number of affordable housing dwellings, additional public open space or community hubs that could be achieved.

It does not test the viability of developments. However the modelling sets minimum building floorplates which are considered viable based on benchmarking (see Tower Podiums in 2.3).

The models also illustrate building envelopes and not designed buildings.
1.4 Operation of the proposed planning controls

Aspects of the planning controls

Council supports

Council’s adopted submission supported the following elements of the planning controls:

• Inclusion of policy to guide the overall urban structure of Fishermans Bend, integration with adjoining neighbourhoods and preferred future character.

• Identification of a range of building typologies for each precinct and sub-precinct.

• Development of a suite of planning controls to facilitate different building typologies, including FAR, building heights, setbacks, street wall heights and site coverage requirements.

• General approach to building heights with mandatory heights in key locations, including ‘interface’ areas adjoining established residential neighbourhoods.

• Mandatory winter solstice overshadowing controls for key public open space.

• Mandatory minimum separation distances between buildings.

• 70 per cent site coverage requirement for the non-core areas of Sandridge and Wirraway to encourage courtyard and perimeter style mid-rise developments, increase permeability of sites, and promote a more landscaped, family friendly character in these areas.

• Protection of overshadowing of residential areas south of City Road, Williamstown Road and east of Boundary Street.

Elements of the planning controls which require further refinement

To ensure the Framework outcomes are fully achieved, the intent and inter-relationship between some controls requires further clarification.

In addition, some controls require strengthening to ensure the aspirations and the targets of the Framework are achieved.

This includes greater use of planning scheme provisions in place of the extensive use of local policy proposed by the amendment.

These elements are discussed in this report and summarised in Table 1.
<table>
<thead>
<tr>
<th><strong>Outcome sought</strong></th>
<th><strong>Elements requiring further refinement</strong></th>
</tr>
</thead>
</table>
| Creating distinctive neighbourhoods with diverse built form typologies | • Provide clearer guidance on Fishermans Bend-wide structural elements.  
• Provide more specific guidance around the character to be delivered in precincts and sub-precincts.  
• Include policy about the scale of Fishermans Bend in relation to the CBD, Southbank and Docklands.  
• Provide more tailored controls for each built form typology specific to each precinct and include a wider selection of built form typologies in policy.  
  - Promote mid-rise development through refinements to the controls, including building lengths and changes to the communal open space provision.  
  - Provide better design guidance for high-rise buildings, including maximum tower dimensions and maximum floorplate sizes and promote well-designed slender towers with a bottom, middle and base.  
• Clarify the relationship between FAR, FAU and the built form controls.  
• Test the workability of the proposed laneway layout in the draft Framework.  
• Review heights in the Montague and Wirraway Core Areas to align with the vision for those centres. |
| Creating a high quality, high amenity public realm | • Address workability of the controls for 8-10 storey development.  
• Identify preferred street wall heights for the Plummer Street / Fennell Street Civic Boulevard and the Buckhurst Street Green Spine which reinforce urban structure and minimise overshadowing of the public realm.  
• Ensure Council’s proposed public open space in Sandridge is not overshadowed by development in Lorimer.  
• Ensure the South Melbourne Market and key footpaths in South Melbourne are not overshadowed by development in Montague.  
• Refine the extent of the Retail Core Areas and consolidate guidance for Primary and Secondary Active Frontages. |
| Delivering high quality buildings | • Promote design quality in all buildings.  
• Strengthen consideration of heritage. |

Table 1. Elements of the planning controls which require further refinement
2.0 Creating distinctive neighbourhoods with diverse built form typologies

The diversity and distinctiveness of neighbourhoods and places must be an inherent part of the character and attraction of Fishermans Bend. This will create a strong sense of place for new communities and achieve legibility of the area.

Through the draft Framework and proposed planning controls, Council is seeking to:

- Create a clear and legible built form that contributes to the wider Melbourne ‘cityscape’, wayfinding and reinforces character.
- Create a varied skyline that distinguishes the different place character for each neighbourhood.
- Provide a transition between high rise and low rise areas to protect sensitive interfaces.
- Ensure delivery of diverse typologies, including mid-rise and low-rise development, in addition to towers and other high rise options.
- Ensure the urban structure reinforces place and creates diverse, mixed use neighbourhoods with boulevards, streets and lanes which provide strong connections and transport spines and a network of distinct activity centres and public spaces.
342-348 Victoria Street, Brunswick (Design: Fieldwork, Visualisation: Gabriel Saunders, Client: Australian Licorice Company Pty Ltd)

Hawke + King, West Melbourne, Six Degrees Architects courtesy of Brunswick Group

Trafalgar Place in Elephant & Castle, London by dRMM Architects for Lendlease (Photographer: Alex de Rijke)

Community Chalkboard, Virginia, USA by Siteworks

Cumberland Park, Nashville, USA by Hargreaves Associates
2.1 Cityscape, scale and legibility

Contributing to a varied inner city skyline

Issue and background

A gap in the draft Framework and proposed planning policy is the absence of policy guiding how the skyline of Fishermans Bend is to relate to Docklands, Southbank, the Hoddle Grid, South Melbourne and Port Melbourne. The cityscape has been a concern for the City of Melbourne and City of Port Phillip. The City of Melbourne in Clause 21.06 Built Environment and Heritage of the Melbourne Planning Scheme - 21.06 – 1 Urban Design seeks to ‘Ensure a strong distinction between the built form scale of the Central City with that of development in surrounding areas.’

The Vision for Fishermans Bend is not to merely to create an extension to the Central City. Instead, Council considers that Fishermans Bend should have its own distinctive and varied skyline.

The Capital City Zone does not have to mean high rise across the board. City North, Arden Macaulay, Central City and Southbank are all zoned CCZ but have different built form outcomes. Indeed, the skyline varies greatly in various parts of the Hoddle Grid itself.

A legible cityscape is important to:

- Help develop a distinct character and identity for Fishermans Bend and its precincts as distinct from Docklands and Southbank
- Indicate the primacy of places and centres, emphasising the CBD as the premier commercial and retail centre in Melbourne
- Assist with wayfinding and orientation (from outside and within the precinct).

Figure 6 shows the CBD, Southbank and Fishermans Bend based on the DDO model.

The figure shows that the exhibited planning controls create the potential for buildings on Ingles Street of 80 to 90 storeys before they are capped out by flight path requirements. The height of these buildings would be equivalent to Eureka Tower (at 91 storeys) and taller the Rialto (at 55 storeys).

Preferred outcome

To achieve a more distinct and legible skyline for Fishermans Bend (see Figures 7 and 8), Council is proposing:

- The height of Fishermans Bend should be lower than the Melbourne CBD to reinforce the CBD’s primacy.
- A hierarchy of heights within precincts, with Sandridge having the highest buildings, followed by Montague and then Wirraway with the lowest heights.
- Clear differentiation between the core and non-core areas in each precinct, with higher heights in the core and lower heights in the non-core.

Council is recommending the following changes to maximum building heights:

- Contain height in the Sandridge Core to west of Ingles Street
- Reduce heights in the Wirraway Core and Montague South Core

This will be expanded on at the Precinct Hearings. The planning scheme should contain policy which reinforces this scale difference to help guide the consideration of building heights particularly where unlimited heights are permitted.

These changes would emphasise the primacy of the CBD (and Southbank) is emphasised through the scale of buildings compared to Sandridge. The approach also provides a bigger break between the western end of the CBD and height in Sandridge.

Council also recommends reducing building and tower widths to minimise the “wall of buildings” and promote slender towers to improve legibility of the skyline by increasing the spacing between towers (see Recommendation 9).

RECOMMENDATION 1:

- Include policy in Clause 22.15 which recognises relative scale difference between CBD and other areas.
Figure 6. Cityscape - view looking north from Port Phillip Bay - DDO model with CBD and Southbank (showing approved permits)

Figure 7. Cityscape - view looking north from Port Phillip Bay - Council's Preferred Outcome model with CBD and Southbank

Figure 8. Cityscape in Council's Preferred Outcome model.

Clear differentiation between core and non-core areas within Fishermans Bend, with higher heights in Core areas, and lower heights in non-core areas.

Legible skyline with clear hierarchy of height from highest to lowest - Melbourne CBD, Sandridge, Montague and Wirraway.
**Creating a series of places through distinct built form**

**Issue and background**

The Vision for Fishermans Bend clearly emphasises a desire to create a series of distinct places. Fishermans Bend runs the risk that each precinct blurs into the next and has no distinct identity. In particular, there is a need to differentiate between:

- Sandridge and Lorimer
- Montague and Sandridge
- Sandridge and Wirraway.

There is also a need to differentiate the role of Core and Non-Core Areas, critical in establishing a ‘heart’ for each Precinct.

While a mix of uses is expected across Montague, Sandridge and Wirraway, a key focus for Council is on creating activity centres and core retail areas which deliver the endorsed vision.

Land uses are one way of doing this, by ensuring that anchor retail is focussed in one location. However this must also be reinforced through the built form.

**Modelling shows:**

- The potential for the western part of Sandridge to blur into Wirraway (see Figures 11, 13 and 17).
- The tallest buildings are located the furthest away from the Sandridge Core Retail Area and Fennell Street, towards Lorimer and the Freeway (see Figures 9).
- The shape of the skyline is skewed towards the Sandridge Non-Core (see Figures 9, 11, 13 and 17).
- There is a sharp transition in height between Montague North and Montague South (see Figures 15 and 17).

**Preferred outcome**

To achieve more distinct Precincts and Core and Non-Core Areas, Council is recommending the following changes:

- Ensure the primacy and legibility of each core area by locating the tallest buildings at the heart of the core area (see Figures 10, 12, 14 and 18).
- Provide a more gradual transition from Sandridge to Lorimer by reducing the height of the tallest buildings at the northern edge of Sandridge (see Figure 10).
- Reduce heights in the Montague South Core to integrate with the existing urban grain and low-rise buildings, providing a gradual transition from the vastly different character in Montague North to Montague South (see Figure 16).
- Reduce heights in the Wirraway Retail Core to ensure its built form is more closely aligned with endorsed Vision and Preferred Future Character (see Figures 12 and 18).
- Locate the lowest building height in Core Areas in Wirraway, followed by Montague South, Montague North and Sandridge (see Figures 12 and 18).

This will be expanded on at the Precinct Hearings.

Include controls in the DDO that deliver mid-rise scaled towers that are designed to integrate with the existing character of the area while providing good levels of amenity.

**RECOMMENDATION 2:**

- Amend building heights to differentiate between Precincts and Core and Non-Core Areas.
- Include policy in Clause 22.15 which recognises relative scale difference between Lorimer, Sandridge, Montague and Wirraway.
- Clearly define the extent of Core Retail Areas.
- Clearly differentiate the character between Core and Non-Core Areas.
The tallest buildings are located the furthest away from Fennell Street, towards Lorimer and the West Gate Freeway.

Provide a more gradual transition from Sandridge to Lorimer by reducing the height of the tallest buildings at the northern edge of Sandridge.
Lack of differentiation in height between Wirraway Core and Montague Core. The potential for West Sandridge to blur into Wirraway. Lack of a clear differentiation between core and non-core areas. The shape of the skyline in Sandridge is skewed towards the non-core boundary.

Lower heights create a clear differentiation between Wirraway Core and Montague Core, with lower heights in Wirraway to reinforce the skyline hierarchy. Clear transition between core and non-core areas. Lower heights between Ingles and Boundary Street reinforce the Sandridge core area, west of Ingles Street.

Figure 11. View of Fishermans Bend looking north from Port Phillip Bay - DDO model (showing approved permits)

Figure 12. View of Fishermans Bend looking north from Port Phillip Bay - Council’s Preferred Outcome model
Figure 13. Sandridge looking from the south – DDO model

The exhibited planning controls create the potential for buildings on Ingles Street of 80 to 90 storeys before they are capped out by flight path requirements. The height of these buildings would be equivalent to Eureka Tower (at 91 storeys) and taller the Rialto (at 55 storeys).

Figure 14. Sandridge looking from the south – Council’s Preferred outcome model

Ensure the primacy and legibility of the Sandridge core area by locating the tallest buildings at the heart of the core area.
Figure 15. Montague looking from the west – DDO model (showing approved permits)

Figure 16. Montague looking from the west – Council’s Preferred Outcome model

Lack of transition to Montague South Non-Core Area.

Lower heights proposed in Montague South to transition down to the Non-Core Area.
Figure 17. 3D model of Sandridge and Montague – DDO model (showing approved permits)

Figure 18. 3D model of Sandridge and Montague – Council’s Preferred Outcome model
2.2 Urban Structure

Overall

Issues and background
A well-defined urban structure for Fishermans Bend will establish the ‘bones’ for future development.

Urban structure contributes to legibility, a distinct sense of place and guides investment decisions.

This is particularly important given the large size of Fishermans Bend and the high proportion of privately owned properties meaning that the precinct will be delivered by many partners over a long period of time.

Key elements of the urban structure include:

- Primary boulevards and transport spines
- Parks and urban plazas connected by linear green spaces
- Core areas where employment and more intense development is concentrated
- A network of distinct activity centres which act as the ‘community heart’ for residents and workers. These include locations for community hubs, core retail areas and primary/secondary active frontages.

Together these key spatial elements create an integrated foundation for place, both across the Fishermans Bend precinct and within its individual neighbourhoods.

The urban structure, through transport and public space connections, can also ensure Fishermans Bend is integrated with adjoining established neighbourhoods.

A clear urban structure for Fishermans Bend and its precincts are missing from the draft Framework and the proposed planning controls.

The Urban Design Strategy includes a proposed Urban Structure Plan at Figure 4 (see Figure 19) however, it is missing fundamental elements such as where key retail and other anchor land uses are intended to cluster.

An updated version of this urban structure should be included within the Amendment. Proposed policy at Clause 21.06-8 Fishermans Bend of the Municipal Strategic Statement (MSS) attempts to describe some of the key elements, however some of this is written as description and not strategy and is difficult to follow without a map that layers all of the relevant material.

Plans such as these are included in Precinct Structure Plans in greenfield areas.

Preferred outcome
To make these key structural elements clearer, it is recommended that a revised plan is included in the planning controls (see Figure 20).

The specific elements of urban structure are discussed in the following sections.

Specific recommendations for changes to public open space and community hubs were outlined in Council’s Stage 1 submission.

Further details and the implications of the structural changes will be expanded on in the Precinct Hearings.

RECOMMENDATION 3:
- Amend Schedule 1 to the CCZ to provide clearer guidance on Fishermans Bend-wide structural elements by including a plan for each precinct which defines the future urban structure, including the location of activity centres, core retail areas, community hubs and civic buildings, key public spaces, civic streets, and transport corridors and nodes (see Figure 20).
Figure 20. Urban Structure proposed by Council
City block structure and street network

Issues and background

The street network is a key element of the urban structure in Fishermans Bend.

Given the existing large land parcels, a large number of new roads will need to be delivered to create a high level of permeability and break up large blocks, connect existing streets and key locations and provide access to properties.

A grid pattern is considered to enhance permeability, promote efficiency, create regular shaped blocks and provide an adaptable and flexible urban structure for built form.

Council considers that the street network in Fishermans Bend should reflect the principles, legibility and proportions of the Hoddle Grid through:

• Blocks of approximately 95m by 200m.
• East-west streets designed to carry less vehicular traffic (i.e. the Plummer / Fennell Civic boulevard, Buckhurst Street Green Spine).
• North-south streets which fulfil a collector role.
• Predominantly north-south pedestrian focussed laneways.

In Sandridge core, there are three very large street blocks proposed which Council considers should be reduced in size through an additional local street. This will be expanded on at the Sandridge Precinct Hearing.

Indicative laneways are shown in the draft Framework. However, these plans have not been included in the proposed planning controls.

The only guidance for the spacing of laneways is in the proposed controls in Local Policy Clause 22.15 (which encourages laneways every 50m in core areas and 100m in non-core areas).

Issues with the proposed new and existing laneways shown in the draft Framework include:

• The target in Local Policy of laneways every 50m in core areas and 100m in non-core areas is not currently being achieved in the Framework plans.
• Laneways shown currently in some instances compromise the ability to achieve the intended land use and built form outcomes.
• Some laneways are proposed through heritage properties and need to be relocated.
• In some cases, laneways are shown along property boundaries, with half of the laneway on each property. If this is the intent, a single property would not be able to deliver the full cross section of a laneway. It is unclear how construction and traffic management (vehicles, bikes and pedestrians) is going to be managed, in instances where only half a laneway is in place for a long extent of time.
• Laneway widths can be much narrower than building separation distances required for buildings on a site.
• Montague South has a variety of laneways, many of which are narrow at 6m or less. The width of many lanes is insufficient to carry two way vehicular traffic or provide adequate turning circles for larger vehicles.

Preferred outcome

Highlight the Plummer / Fennell Civic Boulevard (Sandridge/Wirraway)), Bertie Street (Sandridge), Normanby Road and Buckhurst Street (Montague) in the plan/s in the CCZ1 showing the future urban structure (refer Figure 20).

The Precinct Hearings will expand on preferred outcomes for new streets and laneways in Montague, Sandridge and Wirraway.

Further work is needed to refine laneways in Fishermans Bend and address the issues raised above. This should form part of Precinct Planning, which needs to:

- Refine the preferred number and location of laneways to achieve pedestrian permeability, preferred built form outcomes and ensure crossovers along linear parks are minimised.
- Nominate the different types of laneways (e.g. active, connecting and access) depending on the purpose they are seeking to achieve. For example, some will be to primarily provide servicing and/or access roles, while others will be intended to become pedestrian only/active destination spaces.
- Define laneway cross sections.
- Determine requirements for widening of existing laneways in Montague South.
RECOMMENDATION 4:

• Amend Schedule 1 to the CCZ to include a plan for each precinct which shows streets and lanes (noting this should be updated following precinct planning).

• Ensure Precinct Planning refines laneway design through:
  - Refine the preferred number and location of laneways.
  - Nominate the different types of laneways and their roles.
  - Define laneway cross sections.
  - In Montague South, determine requirements for widening of existing laneways.
Locations for landmarks, nodes and gateways

Issues and background

Urban design analysis often includes the identification of nodes, landmarks, terminating vistas and gateways. They can include prominent corners or open space or existing buildings including heritage buildings.

The design response to these sites can vary and can include exemptions to street walls requirements, additional height or exemplar buildings and civic spaces.

No landmark, gateway or significant corner sites are identified in the draft Framework.

Preferred outcome

Council has defined key sites, key corners, landmarks and gateways and recommends they are referenced in policy and the DDO to enhance the legibility of the precinct, link to the past and create a unique identity (see Figure 21).

It is proposed that key development sites and place making opportunities are identified in the plan trigger a design competition or design review (see Section 4 for further details).

RECOMMENDATION 5:

- Include a map of key sites, landmarks and gateways in the MSS at Clause 21.06-8 to guide built form outcomes and include policy direction for these sites which identifies their significance and key considerations.
- See Recommendation 15 requiring design panels and design competitions for key sites.
Figure 21. Key sites, landmarks and gateways - sites proposed by Council to be subject to Design Competitions and Design Reviews.
2.3 Delivering diverse scales of development and built form typologies

Providing further guidance on built form typologies and character

Issues and background

The endorsed Vision for Fishermans Bend outlines the desire for each precinct to have a distinct character and to encourage a range of building typologies but provides limited guidance on these.

Additional guidance on preferred character and typologies to supplement the vision is provided in proposed changes to the MSS at Clause 21.06-8. However this could be further developed and strengthened to support the delivery of the vision.

While some precincts, such as the core of Sandridge, Montague North and southern part of Lorimer, are clearly envisioned to include towers, there is a desire for other areas to create mid-rise neighbourhoods with more variation in building typologies offering diverse housing choices. This includes block development (including courtyard, perimeter block) and hybrid buildings in Wirraway, and narrow lot/infill and shop top housing in Montague.

However the terms ‘low’, ‘mid’ and ‘high’ rise and various types of housing are not defined in the draft planning controls or the UDS. The scales of development are used differently in different precincts. For example, low-rise development in Wirraway is 1-5 storeys and 1-7 storeys in Sandridge and Montague, while mid-rise in Wirraway is 6-23 storeys and 8-23 storeys in Sandridge and Montague except where noted (UDS p.91-92. Areas defined as mid-rise permit heights over 20 storeys.

Additionally terms such as ‘perimeter’ development may mean a courtyard development to one person and a development built to the perimeter to another.

Figure 22. Low rise, mid rise and high rise built form typologies
Preferred outcome

Council has reviewed the preferred character statements and typologies proposed in Clause 21.06-8 and has identified some refinements to those clauses to achieve the endorsed Vision. This will be expanded on at the Precinct Hearings.

This includes expanding the building typologies specified in different areas, providing more detail about the character sought (including the streetscape character) and applying a consistent format.

Additionally some changes to the built form envelopes are proposed to better align building scale with the vision. For example, the planning controls allow for high rise development in Wirraway and Montague South Core Areas when the vision is proposing family friendly neighbourhood centres of a lower more intimate scale.

Part of this clarification of the outcomes sought is to provide definitions of low, mid and high rise. The following definitions are proposed:

- Low rise - 1-4 storeys
- Mid-rise - 5-12 storeys
- High-rise - 13 or more storeys.

Figure 22 shows the range of low, mid and high-rise building typologies sought by Council.

RECOMMENDATION 6:

- Develop and use consistent definitions of low, mid and high rise and include them in the MSS at Clause 21.06-8.
- Include clear definitions of building typologies in the MSS at Clause 21.06-8.
- Amend the Clause 21.06-8 to include a wider selection of built form typologies including narrow lot buildings, block buildings (including T and L shaped blocks), slab buildings (wide linear blocks) and row buildings to further diversify built form typologies delivered.
- Amend Clause 21.06-8 to provide more specific guidance around the character to be delivered in precincts and sub-precincts, and address gaps in guidance to decision making on discretionary building controls and land use, including:
  - outlining the location and intended character of core retail areas
  - describing the preferred built form character and the interaction of development with the public realm (key streets and open spaces), heritage and character buildings and bridges
  - describing the preferred streetscape character and level of street enclosure sought
  - identifying and providing guidance for the reuse / adaptation of heritage and character buildings
  - ensuring that a consistent level of guidance is provided in each precinct and sub-precinct to guide preferred character and land use, having regard to matters such as building massing, height, relationships between buildings, heritage buildings, street wall heights, setbacks, site coverage and other built form elements.
Ability of building envelopes, FAR and FAU to deliver diverse typologies

Issues and background

A key concern of Council is ensuring density controls (FAR and FAU) deliver the preferred built form outcomes, particularly given the difference between allowable FAR and heights in some areas.

The UDS says that “to achieve a diversity of housing across large precincts and within large sites, the FAR controls should not be set too high or predominantly tower developments will be delivered” (p.66).

However, the potential for in some cases a significant amount of GFA from the uncapped FAU creates uncertainty around the delivery of preferred form envelopes.

The UDS argues that the combination of FAR and taller proposed building heights provides more flexibility to deliver diverse built form, however, the building envelopes they allow promote high rise podium tower buildings.

Testing of selected blocks has shown that large sites with lower FAR’s in Non-Core Areas and higher building heights have the potential to deliver up to 50-60 percent more floor area. This is less in Core Areas with higher building heights (see Tables 2-8 and Figures 23-29).

<table>
<thead>
<tr>
<th>Selected Block</th>
<th>Additional floor area through FAU (%)</th>
<th>Building heights (storeys)</th>
<th>FAR</th>
<th>Other controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wirraway Block B</td>
<td>34%</td>
<td>12 &amp; 24</td>
<td>4.1</td>
<td>Affected by overshadowing controls</td>
</tr>
<tr>
<td>Montague Block A</td>
<td>48%</td>
<td>20</td>
<td>6.1</td>
<td></td>
</tr>
<tr>
<td>Sandridge Block F</td>
<td>18%</td>
<td>20, 24 &amp; unlimited</td>
<td>8.1</td>
<td>Includes a new 22m road and 12m wide linear park</td>
</tr>
<tr>
<td>Sandridge Block C (part)</td>
<td>16%</td>
<td>12</td>
<td>8.1</td>
<td>Affected by overshadowing controls</td>
</tr>
<tr>
<td>Non-Core Areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sandridge Block C (part)</td>
<td>62%</td>
<td>24</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td>Sandridge Block A</td>
<td>58%</td>
<td>24</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td>Wirraway Block A</td>
<td>20%</td>
<td>6</td>
<td>2.1</td>
<td>Includes new road and linear park</td>
</tr>
</tbody>
</table>

Table 2. Summary of FAR and FAU for blocks Council has undertaken detailed modelling
Figure 23. Blocks Council has undertaken detailed FAR and FAU modelling.
### Sandridge Block C

<table>
<thead>
<tr>
<th>Building heights</th>
<th>Site area (sqm)</th>
<th>GFA through FAR (sqm)</th>
<th>GFA through FAU (sqm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Area 12 storeys*</td>
<td>15,042</td>
<td>121,840 (8.1:1)</td>
<td>8,294 (0.5:1)</td>
</tr>
<tr>
<td>Non-Core Area 24 storeys</td>
<td>24,608</td>
<td>81,206 (3.3:1)</td>
<td>131,694 (5.4:1)</td>
</tr>
</tbody>
</table>

*Overshadowing controls apply

Table 3 and Figure 24. FAR & FAU in Sandridge Block C

### Montague Block A

<table>
<thead>
<tr>
<th>Building heights</th>
<th>Site area (sqm)</th>
<th>GFA through FAR (sqm)</th>
<th>GFA through FAU (sqm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Area 20 storeys*</td>
<td>15,161</td>
<td>92,482 (6.1:1)</td>
<td>84,585 (5.6:1)</td>
</tr>
</tbody>
</table>

*Only large lots in this block have been included. These are 15-87 Gladstone Street and 6-78 Buckhurst Street.

Table 4 and Figure 25. FAR & FAU in Montague Block A
Sandridge Block F

<table>
<thead>
<tr>
<th>Building heights</th>
<th>Site area (sqm)</th>
<th>GFA through FAR (sqm)</th>
<th>GFA through FAU (sqm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Area</td>
<td>20, 24 and unlimited storeys</td>
<td>40,539</td>
<td>328,365 (8.1:1)</td>
</tr>
</tbody>
</table>

Table 5 and Figure 26. FAR & FAU in Sandridge Block F

Wirraway Block A

<table>
<thead>
<tr>
<th>Building heights</th>
<th>Site area (sqm)</th>
<th>GFA through FAR (sqm)</th>
<th>GFA through FAU (sqm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Area</td>
<td>6 storeys</td>
<td>28,217</td>
<td>59,256 (2.1:1)</td>
</tr>
</tbody>
</table>

Table 6 and Figure 27. FAR & FAU in Wirraway Block A
### Sandridge Block A

<table>
<thead>
<tr>
<th>Building heights</th>
<th>Site area (sqm)</th>
<th>GFA through FAR (sqm)</th>
<th>GFA through FAU (sqm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Area</td>
<td>24 storeys</td>
<td>15,831</td>
<td>52,242 (3.3:1)</td>
</tr>
</tbody>
</table>

*Excluding part of White street which is proposed to be closed for POS.
**Site coverage of 70 percent applies

Table 7 and Figure 28. FAR & FAU in Sandridge Block A

### Wirraway Block B

<table>
<thead>
<tr>
<th>Building heights</th>
<th>Site area (sqm)</th>
<th>GFA through FAR (sqm)</th>
<th>GFA through FAU (sqm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Area</td>
<td>12 &amp; 24 storeys*</td>
<td>26,730</td>
<td>109,595 (4.1:1)</td>
</tr>
</tbody>
</table>

*Overshadowing controls apply

Table 8 and Figure 29. FAR & FAU in Wirraway Block B

Likely to be constructed as 24 storey tower podium buildings as substantial opportunities for FAU available above the podium

Indicative communal open space to meet the discretionary 70% site coverage and 30% communal open space requirement

Sites likely to develop to discretionary height of 24 storeys given substantial FAU opportunities. No controls on tower dimensions and floorplate sizes apply.

12 storey buildings with large upper setbacks to meet overshadowing controls which apply to the southern footpath of Plummer Street
Preferred outcome

Cap on FAU

Ms Hodyl’s testing based on FARs and the building envelopes demonstrates that a diverse range of building typologies can be achieved on many sites, especially where building heights allow it. However uncapped FAU has the potential to undermine this fundamental approach.

Council in its Stage 1 submission strongly put that the extent of FAU should be limited.

However Council also considers this is important not just from a population perspective but also from a built form perspective.

This is necessary to create the diverse built form typologies which are unlikely to be achieved as intended through the application of the FAR.

In other jurisdictions where FAU or uplift is available, it is usually capped.

Further testing is required to understand what an appropriate cap taking different factors into account (including residential densities, the provision of additional infrastructure, provision of affordable housing and the financial viability / attractiveness of the uplift to the development industry.)

Better link FAR, FAU and building envelopes in the planning controls

A key gap in the planning controls is an explanation of the relationship between the FAR, FAU and the built form controls in DDO30. This creates potential confusion about the scale of development that can be achieved under the controls.

The proposed FAR and potential FAU controls need to work together with other built form controls (including heights, setbacks and site coverage), to achieve the desired built form outcomes in each precinct.

It is recommended that amendments are made to CCZ 1 and DDO30 to clarify the relationship between FAR, FAU and the preferred built form controls. This should specify that FAR and FAU are not as of right, and must be read in conjunction with the built form outcomes in DDO30 (including the preferred maximum heights).

RECOMMENDATION 7:

• Limit the extent of Floor Area Uplift (FAU) to promote diverse building typologies are delivered.

• Amend the CCZ 1 and DDO30 to reinforce the relationship between density and built form controls to ensure that it is clear that FAR and FAU must also meet the preferred built form outcomes.
Promoting mid-rise development

Issues and background

The majority of planning permit and planning applications in Fishermans Bend have been townhouses or towers (see Figure 30).

Development does not have to be high rise to deliver a high-density environment.

In this regard, it is noted that delivering significant amounts of new housing and employment opportunities at Fishermans Bend is not reliant on high-rise tower development throughout the precinct (Urban Design Strategy, Hodyl & Co. 2017).

A compact, walkable and liveable environment can be achieved through mid-rise development which still delivers significant density.

DDO30 currently encourages podium-tower building typologies for buildings over 10 storeys in height.

As a key element of the endorsed vision is the desire to create mid-rise neighbourhoods with more variation in architectural styles, Council undertook benchmarking of mid-rise development.

The purpose of the benchmarking was to understand the key characteristics of the mid-rise scale of housing to inform the tailoring of the controls.

Two key types of mid-rise development were benchmarked - large sites and infill on narrow sites.

Mid-rise benchmarking for large sites

Mid-rise benchmarking (see Figures 31-34) demonstrated that:

- Site sizes varied from 37x59m to 68x137m.
- FARs ranged from 3.1 to 7.8 with buildings of 3-15 storeys.
- Site coverage ranged from 57-70%.
- Open spaces were located on ground, level 1 or level 2.
- Car parking was mostly provided on or above ground and sleeved.
- Building separation distances varied from approximately 4.6m to 20m.
- Visual bulk was addressed by breaking up built form mass into smaller buildings with diversity in architectural form, rooflines, materiality and façade articulation and detailing.
- Mid-scaled towers in line with the low to mid-rise built form scale were incorporated into the built form.
- Smaller building footprints allow for sunlight and daylight into the centre of deep sites.
- Changes in scale/transition were often achieved through a series of individual buildings rather than a stepped wedding cake approach.
- Buildings ranged from double aspect row houses 15m deep to single aspect single loaded apartments at 13m deep and double loaded, single aspect apartments from 20m deep.
- Diverse building typologies were incorporated into low to mid-rise built form scale.

- Multiple entries addressed the street and internal spaces helping to activate the public realm.
- Buildings included non-residential uses such as communal spaces, hotel, retail and commercial, often on the ground floor.
Figure 30. Building typologies proposed by approvals and current applications
221 Kerr Street, Fitzroy

- Site Area: approx. 2,180 sqm
- GFA: 8,912 sqm
- FAR: 4.1:1
- Open Space: 604 sqm (Level 02)
- Site Coverage: GL - 100%, L2 - 70%
- Number of Buildings: 3
- Number of Dwellings: 51
- Car Spaces: 61 (across 2 levels)

Hawke + King, West Melbourne

- Site Area: approx. 2,446 sqm
- GFA: 9,220 sqm
- FAR: 3.8:1
- Open Space: 760 sqm
- Site Coverage: 69%
- Number of Buildings: 3
- Number of Dwellings: 74
- Car Spaces: 98 (across 2 basement levels)
**West End, West Melbourne**

- Site Area: approx. 9,200 sqm
- GFA: approx. 75,500 sqm.
- FAR: 7.8:1 (excl. basement); 8.2:1 (incl. basement)
- Open Space: 460sqm (ground), 1,000sqm retail arcade and 2,200sqm private garden on podium
- Site Coverage: GL - 93%, L2 - 57%
- Number of buildings: 5
- Number of Dwellings: 377 apartments & 92 serviced apartments Hotel (77m² average apartment size)
- Car Spaces: 584 (2 Basement + 2 Levels above ground + mezzanine)

*Figure 33. West End, West Melbourne (Perimeter and courtyard block benchmarking)*

**122 Roseneath Street, Clifton Hill**

- Site Area: approx. 3,040 sqm
- GFA: 9,280 sqm
- FAR: 3:1
- Open Space: 1,100 sqm (Level 01)
- Site Coverage: GL - 100%, L1 - 64%
- Number of Buildings: 3
- Number of Dwellings: 85
- Car Spaces: 41

*Figure 34. 122 Roseneath Street, Clifton Hill (Perimeter and courtyard block benchmarking)*
Mid-rise benchmarking for narrow infill sites

Mid-rise benchmarking (see Figures 35-38) demonstrated that:

- Site sizes varied from 126sqm to 700sqm.
- Generally built to all boundaries with no front, side or rear setbacks. (Noting exceptions for internal courtyards and rear setbacks to accommodate parking.)
- Strong street walls activated with windows and balconies, often active uses.
- High site coverage – most developments of this typology have 100 percent site coverage.
- Provide opportunities to retain existing building fabric / heritage / character buildings.
- Any levels above the streetwall are set back to define and emphasise the street wall - especially where heritage fabric is retained.
- Narrow lots rely on street/laneway frontage to provide daylight/sunlight and natural ventilation. Some featured breaks in the building design with a separate building element front and back.
- Corner sites have more possibilities to provide increased opportunities to provide access to daylight/ sunlight and outlook.
- Private open space is generally provided in the form of balconies and roof terraces and usually has an outlook to the front or rear of the site (rather than the side) due to narrowness of the site.
- The location of the lift core and services can significantly affect efficient floor layouts on very narrow sites.

- Where dwellings front a rear lane, the width of the lane and distance to other development abutting that lane has a significant impact on amenity (including outlook and daylight).
- Sites with a minimum 17m width allow for parking bays on either side of central vehicular access.
- On smaller sites, parking is often limited and generally accommodated in car stackers accessed from the side or rear. Some sites do not provide parking.
- Access to parking is usually provided from the side or rear streets/laneways to prevent taking up significant portions of the façade.
- Sleevings of car parking on narrow sites is more difficult to achieve with limited space.
**DROO Building, 93 Burwood Road, Hawthorn**

- **Site Area:** approx. 700sqm
- **Open Space:** Terraces (North facing to Laneway, south facing internal)
- **Site Coverage:** 100%
- **Number of Dwellings:** 4 apartments (2 bedrooms) & 1 shop at ground floor
- **Car Spaces:** 2 car stackers (basement & ground level), access from rear laneway
- **Other:** Retains 2 storey heritage building to street

Figure 35. DROO Building, 93 Burwood Road, Hawthorn (Narrow infill benchmarking)

**Hohelufchaussee 19, 20253, Hamburg, Germany**

- **Site Area:** approx. 420 sqm
- **Open Space:** Terraces (South west facing to Laneway) and communal courtyard (on top of parking level)
- **Site Coverage:** 95%
- **Number of Dwellings:** 9 apartments (2 bedrooms) over 5 storeys, 2 storeys of offices
- **Car Spaces:** Unknown number of spaces, rear access, parking at ground level at rear.

Figure 36. Hohelufchaussee 19, 20253, Hamburg, Germany (Narrow infill benchmarking)
STUDIOS 54, Waterloo Street, Surry Hills NSW

- Site Area: approx. 126 sqm
- Open Space: Terraces (facing the street and an internal courtyard / light well)
- Site Coverage: 100%
- Number of Dwellings: 4 apartments and 1 shop/office
- Car Spaces: No car parking provided

Ormond Road Apartment, Ormond Road, Elwood

- Site Area: approx. 363sqm
- Open Space: Terraces (North-East facing to street, North-West facing to laneway)
- Site Coverage: 100%
- Number of Dwellings: 10 apartments & 1 shop & 1 cafe at ground floor
- Car Spaces: 4 car stackers and 1 visitor car park. Double car stacker
Preferred outcome

The critical elements of successful mid-rise typologies which must be included in the planning controls are:

**Large blocks**
- Provision of a minimum area of communal open space.
- Ensuring adequate separation between buildings.
- Ensuring appropriate building heights apply where a mid-rise form is sought (even with the application of an FAR).
- Encourage diversity within the development through different built form scales such as low rise fronting the narrower lanes and taller heights on the edges.
- Provide permeability through the blocks.
- Sleeve and integrate above ground car parking.
- Transitions in building height are addressed by whole buildings rather than a stepped/wedding cake approach.
- Large blocks are broken up into smaller, more human scaled buildings with more opportunities for individual identity.
- Smaller buildings to allow for better views/outlook, daylight and sunlight to dwellings and communal spaces and reduce the impact of large, slow moving shadows.

**Narrow infill sites**
- Developments are built to the boundary to reinforce a strong street edge.
- Ensure any levels above the streetwall are set back to define and emphasise the street wall - especially where heritage fabric is retained.
- Ensuring upper level setbacks above the street wall apply on laneways as well as streets to provide for amenity and opportunities for private open space.
- Separation distances allow for:
  - courtyards in the middle of the building allowing natural light and ventilation
  - development above the street wall (ie pop-up elements) which balance equitable development rights and provide for amenity and outlook.
- The adaptive reuse of heritage and character buildings in new developments.
- Built form reflects the scale and materiality of the existing area and adjoining sites/buildings.
- Provision of access to car parking is from rear laneways where possible to retain active frontages at street level. (This may result in the need to widen existing lanes or include rear setbacks.)

RECOMMENDATION 8:
- Reduce the scale of high rise and encourage a diversity in building typologies such as hybrids in Wirraway Core (see changes to building heights and street walls).
- Amend the building separation controls in DDO30 to clarify how the separation distances apply to developments on the same site.
- Amend the site coverage requirements in DDO30 to allow communal open space above street level, but with access to street level (see Recommendation 14).
- Amend DDO30 to limit mid-rise building lengths to a maximum of 50m for residential buildings through the provision of through block links or separation between buildings, except for north of Sandridge where campus buildings should be encouraged.
- Amend DDO30 to require that above ground car parking is sleeved and integrated into the building.
- Amend DDO30 to clarify the requirements for upper level setbacks above street walls on laneways and side and rear setbacks between upper levels above the street wall within a site and on abutting sites (see Recommendations 11 and 12).
- Ensure laneway widths are adequate to provide rear vehicular access to sites.
Tower podiums

Issue and background

High rise towers are supported in Sandridge Core and Montague North, with more mid-rise towers sought by Council in the Montague and Wirraway Core Retail Areas.

Proposed changes to Clause 21.06-8 of the MSS contains references to ‘Well-spaced, slender towers that provide sunlight access to streets and neighbouring residences.’

However there are no proposed controls which ensure the slenderness of towers (i.e. limiting floorplate sizes and dimensions and articulation of towers to reduce visual bulk).

FAR and other building envelope controls may to some extent limit the amount of floorspace, however FAR can be exceeded through FAU. Noting the Minister is proposing to remove the ability to exceed FAR through non-residential floor space in the Core.

Modelling shows that the raw building envelopes create big, boxy, dominant massing, and in other locations large, elongated, slab-like floorplates (see Figure 39) which can have negative impacts on the public realm from large and slow moving shadows, poor amenity for building occupants and impacts on the skyline.

When adequately separated and oriented, compact floorplates and slender towers can:

• Minimise shadow impacts and negative wind conditions on surrounding streets, open space and properties.
• Minimise loss of sky views from the public realm.
• Allow for the passage of natural light into interior building spaces (e.g. shallow rather than deep floor plates), an important contributor to sustainability.

Lack of tower width controls could result in slab-like floorplates (this example shows a 95 metres wide tower).

Table 9. Maximum tower widths, depths and floorplates used for modelling in the Fishermans Bend Urban Design Strategy

<table>
<thead>
<tr>
<th>Building typology</th>
<th>Maximum building width</th>
<th>Maximum building depth</th>
<th>Minimum Floorplate area</th>
<th>Maximum Floorplate area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential apartments (low-mid rise)</td>
<td>10m</td>
<td>20m</td>
<td>450sqm</td>
<td>900sqm</td>
</tr>
<tr>
<td>Residential apartments (high rise)</td>
<td>15m</td>
<td>30m</td>
<td>600sqm</td>
<td>900sqm</td>
</tr>
<tr>
<td>Commercial buildings (medium-high rise)</td>
<td>15m</td>
<td>50m</td>
<td>600sqm</td>
<td>2,000sqm</td>
</tr>
</tbody>
</table>
residential liveability, and workplace productivity.

- Create architectural interest and visually diminish the overall scale of the building mass.
- Present an elegant profile for the skyline (Source: Toronto Tall Buildings Design Guidelines, City of Toronto, March 2013).

**Benchmarking of tower width, depths and floorplates**

Benchmarking undertaken by Port Phillip suggests different approaches are required for commercial and residential towers as they have different requirements. The Better Apartments Design Standards (BADS) limit residential building widths to some extent through circulation and room depth requirements. These controls effectively limit tower widths to 25-30m deep.

Assumptions from the Fishermans Bend Urban Design Strategy and work by Hayball as part of benchmarking in the Central City Built Form Review were used to inform Council's work (see Table 9 and Figure 40).

Council also undertook its own benchmarking of commercial and residential development both within and outside Fishermans Bend. Key findings include:

- Both noted the difference between floorplate requirements for commercial and residential buildings.
- The floorplates of commercial buildings are usually larger in area and deeper. Average floorplates were in the order of 2,000-2,500sqm.
- Maximum depths for residential buildings ranged from 20-30m and up to 75m long.
- Hayball identified a maximum sleeve depth of 10m for residential uses and 15m for commercial uses.
- Council found that campus style commercial buildings had an average floorplate of 6,600-9,800sqm.

![Diagram](image-url)

**COMMERCIAL TOWER ENVELOPE ASSUMPTIONS**

- Maximum shell depth of 30m x 80m
- Minimum shell depth of 10m

**RESIDENTIAL TOWER ENVELOPE ASSUMPTIONS**

- Maximum shell depth of 25m x 50m
- Minimum shell depth of 10m

**PODium SLEEving ASSumptions**

- Maximum shell depth of 50m x 50m square
- Minimum shell depth of 10m

Figure 40. Maximum tower widths, depths and floorplates used in benchmarking for C270 Central City Built Form Review (Source - Architectural Testing of Built Form Controls - Melbourne Hoddle Grid / Southbank, Central City Built Form Review, September 2016)
Preferred outcome

It is recommended the following maximum floor widths, depths and floorplates are applied to towers of 13 storeys or over across Fishermans Bend as a discretionary requirement:

These dimensions were confirmed by benchmarking Fishermans Bend applications, developments outside Fishermans Bend, the Better Apartments Design Standards and the work of Hayball.

<table>
<thead>
<tr>
<th>Tower use</th>
<th>Maximum width (m)</th>
<th>Maximum Depth (m)</th>
<th>Maximum Total Floorplate area (sqm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>50</td>
<td>50</td>
<td>2,500</td>
</tr>
<tr>
<td></td>
<td>33</td>
<td>75</td>
<td>2,500</td>
</tr>
<tr>
<td>Residential</td>
<td>25</td>
<td>50</td>
<td>1,250</td>
</tr>
</tbody>
</table>

The aim of these dimensions is to control the bulk of towers and manage overshadowing impacts to the street (see Figure 41).

RECOMMENDATION 9:

- Amend DDO30 to include a discretionary requirement to create slender well-proportioned towers by applying the following maximum dimensions to developments of 13 storeys and higher (i.e. high rise development):
  - Residential buildings: a maximum tower dimension along one frontage of 50m and a maximum floorplate of 1,250sqm.
  - Non-residential buildings: a maximum tower dimension along one frontage of 75m and a maximum floorplate of 2,500sqm.

- Amend DDO30 to promote well-designed slender towers by including a requirement that towers are designed as three carefully integrated parts: a base building, middle, and top.
Figure 41. Tower floorplates to create slender towers preferred by Council

Commercial buildings - maximum floorplate size of 2,500sqm and a maximum dimension of 75m along one frontage.

North-south laneways ensure the slender side of the tower faces key streets (Fennell Street) to reduce visual bulk and maximise sunlight access.

Smaller, slender towers present an elegant profile for the skyline and improve daylight/sunlight access to buildings.
3.0 Creating a high amenity, high quality public realm

To enhance and create a sense of place and to build community pride and connectivity, Fishermans Bend must have a well-designed public realm.

As development intensity increases, the quality of the public realm and managing impacts on amenity becomes more important.

Through the draft Framework and proposed planning controls, Council is seeking to:

• Ensure new buildings create a positive street level environment through ensuring access to daylight, sunlight, sky views and minimising of wind effects.
• Ensure buildings are ‘human scale’, minimise building bulk and create a fine grain character and sense of enclosure at street level.
• Create vibrant street life through active ground floor frontages and upper floors which overlook the street.
• Achieve a high standard of internal and external amenity for dwellings within the Precinct and at the interface with existing residential areas.

Street wall heights

Issue and background

The draft planning controls generally propose a mandatory maximum 6 storey street wall across Fishermans Bend.

The controls also allow an 8 storey street wall on streets wider than 22 metres. However the controls as exhibited were not clear whether this includes a 22m wide road.

Figure 42 demonstrates the different street widths and locations where an 8 storey street wall height is achievable.

Preferred outcome

The 6 storey street wall height is generally supported for 22 mere wide streets as it creates an appropriately human scaled street and establish a strong sense of street definition by adopting a building height at the street edge determined by a 1:1 (building height to street width) ratio.

However Council considers there is a need for more tailored street wall heights in the following locations:

• Plummer / Fennell Civic Boulevard in Sandridge and Wirraway
• Buckhurst Street Green Spine
• Council’s proposed campus area in Sandridge North.

This will be expanded on at the Precinct Hearings.

Proposed changes to the controls as part of Minister’s Part A submission now say greater than 22m which implies the 8 storey streetwall option applies to streets of 23m wide or more. The change to the proposed controls for 8 storey street wall is supported.

RECOMMENDATION 10:

• Support changes proposed in the Minister’s Part A submission to DDO30 that clarify that 8 storey street wall heights apply to streets of 23m or greater in width.
Figure 42. Street widths and applicable street wall heights under GC81

<table>
<thead>
<tr>
<th>Street width (metres)</th>
<th>Permitted street wall height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 12 metres</td>
<td>4 storeys</td>
</tr>
<tr>
<td>13-22 metres</td>
<td>6 storeys</td>
</tr>
<tr>
<td>23+ metres</td>
<td>8 storeys</td>
</tr>
</tbody>
</table>

Street widths:
- 100m
- 200m
- 500m

Permitted street wall heights:
- 4 storeys
- 6 storeys
- 8 storeys
Street walls - technical issues

Issues and background

Street walls on lanes

The proposed planning controls include a maximum street wall height of 4 storeys on lanes (i.e. streets of 12m or less.)

Updates as part of Minister’s Part A submission are proposed which clarify that the upper level setback above the street walls on a laneway should be measured from the centreline of the laneway.

This approach could result in minimal upper level setbacks in lanes or cantilevered upper levels where the setback requirement is less than half of the laneway width. The wider the laneway, the lesser the upper level setback. On a 9m laneway, this upper level setback would 0.5m and would be imperceptible from the ground (see Figure 43).

Street walls abutting parks

There is currently no guidance for what street wall height applies to land abutting existing or proposed open space.

Ms Hodyl recommends in her expert evidence ‘The street wall height of buildings that are immediately adjacent to a park (not separated by a street or laneway) should be a maximum of 15.4 metres and must not exceed 23 metres. A permit cannot be granted to vary this requirement.’

Where street walls turn the corner

A gap in DDO30 is that it does not address where two different street edge heights are nominated on corner sites.

The issue of conflicting street wall heights and the transition from higher to lower street walls has been partially addressed through the Minister’s Part A submission and through Ms Hodyl’s expert evidence. They propose that:

In the instance where two different street wall heights intersect at a corner, the higher street wall height prevails and should not extend more than 30 metres along the narrower street/laneway frontage.
Preferred outcomes

Street walls on lanes

The 4 storey height is supported as it will promote access sunlight in laneways (particularly where a pedestrian focus is sought), create additional diversity in the built form and in locations such as Montague, promote the adaptive reuse of heritage and character buildings.

However in some circumstances it is proposed to allow additional heights in lanes for limited lengths. This will expanded on in the Precinct Hearings.

Change the controls to measure an upper level setback on a laneway from the street wall rather than the centreline of the laneway (see Figure 44).

Where a new laneway is to be created, the upper level setback should be measured from the new building line.

Street walls abutting parks

Council considers it unnecessary to apply a lower street wall fronting proposed public open space, unless an overshadowing control applies which would affect the site.

Instead it is recommended that the street wall height which applies to adjoining sites is applied to the park edge. For example, where an 8 storey street wall height is proposed, the street wall surrounding the park could be 8 storeys.

Where street walls turn the corner

The wording proposed by the Minister to address this issue is supported.

On corner sites where two different street edge heights are nominated, buildings should “turn the corner” and apply the higher street edge and transition to the lower nominated street edge height.

However Ms Hodyl’s recommendation to specify a maximum length is not. 30 metres may be an appropriate length in some circumstances but not in others. Flexibility should be retained.

RECOMMENDATION 11:

• Amend DDO30 to require that where a street wall is required on a laneway, upper level setbacks are measured from that street/laneway frontage and not the centreline of the laneway.

• Amend DDO30 to specify that the street wall that is applicable to abutting properties should also apply to the frontages of any development abutting or adjoining existing and proposed public open space, unless overshadowing controls apply.

• Amend the controls to address instances where two different street wall heights meet, as proposed in the Minister’s Part A submission.
Building to side and rear boundaries on narrow lots

The proposed planning controls which allow for 8 storeys street wall for developments up to 10 storeys in height are supported as they provide additional opportunities for mid-rise development.

Accommodating building services and lift core

The DDO allows buildings up to 8 storeys to be built on the boundary, however above that height buildings must be set back. This means a lift core for a building up to 10 storeys must be set off the boundary creating awkward/unusable space on lower floors between the core and boundary wall (see Figure 45). For narrower sites (less than 20 metres), this also results in an inefficient car parking layout.

Lack of clarity around which side and rear setbacks apply

The controls for side and rear setbacks above the street wall have been written based on a 6 storey street wall and are not clear which setbacks apply to developments above an 8 storey street wall.

The controls could be interpreted as either applying 9m for habitable room windows and 3m for non-habitable room windows or 10m for habitable room windows and 5m for non-habitable room windows (see Figure 46).

These different options have a profound effect on the developability of narrow sites, especially those under 20m wide.
Preferred outcome

It is recommended that the controls provide an exemption in Montague for narrow sites (less than 20 metres) to allow plant equipment to be constructed on the boundary (see Figure 47).

It is considered that the 3m setback for non-habitable room windows (see Figure 48) and the 9m setback for habitable room windows should apply to this specific configuration only.

Noting that where an 8 storey street wall is proposed in other locations (with higher overall building heights), the side and rear setbacks of 5 and 10m should apply. (Locations where other 8 storey street walls are supported will be expanded on in the Precinct Hearings.)

In most cases, it is anticipated that non-habitable room windows will be oriented to the side boundary.

Where habitable room windows are proposed to the side or rear, they should set back 9m to provide for access to daylight, minimise overlooking and retain sky views.

RECOMMENDATION 12:

- Amend the requirement for walls on a side or rear boundary in DDO30 for buildings up to 10 storeys to allow building services / lift core to be located on the boundary.

- Amend the side and rear setbacks which apply above 23m (6 storeys) to a maximum 10 storey building to a minimum 3m setback for non-habitable rooms and 9m for habitable rooms.
Flooding and the need for raised floor levels

Issue and background

As outlined in Council’s Stage 1 submission, significant parts of Fishermans Bend are subject to inundation. In particular, Council is concerned about the impacts of raised floor levels and identified changes to policy at Clause 22.15.

The extent of the floor level changes that are likely to be required range from about 1.2 to 3 metres - a significant issue in retail areas.

Developments fronting the Buckhurst Street Green Spine, designated as a primary retail active frontage area, would need to be raised between 0.6-1.8 metres.

A potential floor height of 1.8m above street level would be required at the intersection of Buckhurst and Ferrars Streets. This will result in poor urban design outcomes. The foyer of the Gravity Tower is cited as an example of this (see Figure 44).

Preferred outcome

Some additional guidance was proposed in Council’s Stage 1 submission, for inclusion in policy at Clause 22.15 however further is guidance is proposed:

• Where this is a public laneway to be vested in Council it must be provided at natural ground level.
• Provide exemptions to street wall requirements, and height controls to allow for more design options to mitigate the height difference between street level and the ground floor and create accessible entries from the footpath.
• Provide additional flexibility in the controls to allow the location of mechanical equipment above the flood level (eg on the roof / podium).
• Require the activation of streets even in cases where ground floors are substantially above the adjacent street level (eg requiring display windows in retail developments).

RECOMMENDATION 13:

• In addition to Council’s recommended changes to Clause 22.15 in its Stage 1 submission, include the following:
  - Include an exemption in DDO30 that where land is subject to inundation or in a Special Building Overlay, the overall building height or mandatory street wall height may be increased by the minimum floor level determined by the relevant drainage authority.
  - Include assessment criteria which allows overall building heights (including for plant and equipment) to be exceeded by the minimum floor level determined by the relevant drainage authority.
  - Include a requirement that lanes that will be vested in Council must be provided at natural ground level and should not be ramped.
Site coverage

Issue and background

The 70 per cent discretionary site coverage requirement for the non-core areas of Sandridge and Wirraway is supported, to encourage courtyard and perimeter style mid-rise developments, increase permeability of sites, and promote a more landscaped, family friendly character in these areas.

The definition of site coverage at Clause 72 of the Planning Scheme is the proportion of a site covered by buildings. Technically this would mean the gross developable area and include land identified for new roads, parks and community infrastructure.

Preferred outcome

In DDO30, specify that site coverage is based on 70 percent of the Net Developable Area (excluding streets, laneways and public open space) instead of Gross Developable Area.

This would prevent the inclusion of roads, streets, lanes and open space in the calculated area, which would undermine the purpose of the requirement in encouraging courtyard and perimeter block developments.

Section 2.3 also identifies the need for more flexibility in the provision of the 30 percent communal open space requirement. The requirement specifies ‘ground floor communal open space’ which will be difficult to achieve with carparking in a mid-rise building.

RECOMMENDATION 14:
• In DDO30, in Site Coverage, specify that site coverage is based on the net developable area and not gross developable area of a site.
• Amend the requirement to allow communal open space to be provided on the ground or first level of a development, providing there is direct access from street level.
4.0 Promoting high quality buildings

Council considers that the design quality of buildings and the public realm as fundamental to creating a liveable, high density place.

Design quality must be embedded within the draft Framework and the planning controls.

Through the draft Framework and proposed planning controls, Council is seeking to:

- Promote design quality which addresses architectural quality, effective use of resources, high-quality materials, innovative and sustainable building design and construction in all developments
- Ensure the valued elements of Fishermans Bend such as its heritage buildings are reused and celebrated.

Preferred outcome

The items listed in the policy focus on context. Context is only one element of good design.

The concept of design excellence / design quality should also include architectural quality, effective use of resources, high-quality materials, safety, comfort and liveability of the design as well as innovative and sustainable building design and construction.

Additionally the process of designing and delivering built form should also be considered as a mechanism for achieving design quality. New South Wales promotes reviews and design competitions as mechanisms to review projects which exceed discretionary heights, FAR and on some specified sites.

This should be considered as a requirement for specific developments within Fishermans Bend.

Key sites have been identified which include sites fronting key retail streets (in the Core Retail Areas), locations of new bridges and key development sites in prominent locations. Participation in a design review process is recommended.

Additionally four key sites have been identified with such strategic importance that a design competition should be required. These are high profile, highly visible sites which require an innovative approach to design to create a landmark building or space.

RECOMMENDATION 15:

- Change the reference in Clause 22.15 from ‘design excellence’ to ‘design quality’ so that there is a more tangible link to local and state policy and include additional items including:
  - consideration of the site and surrounding context and the impact new development will have on the urban realm
  - innovation in design and construction methods
  - innovative development models and sustainable building design
  - architectural quality
  - effective use of resources
  - high-quality materials
  - integration of building services
  - building adaptability.

- Amend policy and DDO30 to:
  - Require that development and place making proposals for identified key sites and locations are assessed by an expert panel prior to lodgement.
  - Require that a design competition is held for landmark sites at Ingles Street Triangle, Sandridge Arts and Culture Hub and Civic Square, the Wirraway Sport and Recreation Hub and the Montague Sport and Recreation Hub.
Heritage and character buildings

Issue and background

A gap in the controls is any reference to heritage places. In particular, there is no guidance on how to deal with tall buildings adjacent to lower scale heritage places.

There are references to adaptive reuse of heritage buildings in the Preferred Character Statements but not for all areas with a high number of identified heritage buildings.

There is also no reference to character buildings. Fishermans Bend and Montague in particular also contains a number of buildings which, although they are not significant heritage places, do contribute significantly to the character of the Precinct.

The retention and adaptation of these buildings, through innovative design and re-use is sought. They include a number of one and two storey red brick warehouse buildings abutting laneways, which contribute to the gritty and intimate character of the Precinct.

Preferred outcome

Tall buildings adjacent to a lower-scale heritage property should:

• design new base buildings to respect the urban grain, scale, setbacks, proportions, visual relationships, topography, and materials of the historic context.

• provide additional tall building setbacks, upper level setbacks and other appropriate placement or design measures to respect the heritage setting.

RECOMMENDATION 16:

• Amend DDO to include:
  - A reference to heritage in the DDO objectives.
  - Heritage considerations in the Built Form Outcomes for heights, street walls and upper level setbacks, separation distances site coverage and active frontages.
  - The following requirements:
    - Promote the retention of heritage places in Fishermans Bend, including adaptive reuse.
    - The design of new buildings should respect the character, height, scale, rhythm, materials and proportions of heritage places.
    - New buildings should step down in height, massing and scale to adjoining lower scale heritage places.
    - Encourage the retention and adaptive re-use of character buildings. Noting the policy would need to include the appropriate map showing these properties.
5.0 Summary of Recommendations

RECOMMENDATION 1:
• Include policy in Clause 22.15 which recognises relative scale difference between CBD and other areas.

RECOMMENDATION 2:
• Amend building heights to differentiate between Precincts and Core and Non-Core Areas.
• Include policy in Clause 22.15 which recognises relative scale difference between Lorimer, Sandridge, Montague and Wirraway.
• Clearly define the extent of Core Retail Areas.
• Clearly differentiate the character between Core and Non-Core Areas.

RECOMMENDATION 3:
• Amend Schedule 1 to the CCZ to provide clearer guidance on Fishermans Bend-wide structural elements by including a plan for each precinct which defines the future urban structure, including the location of activity centres, core retail areas, community hubs and civic buildings, key public spaces, civic streets, and transport corridors and nodes (see Figure 20).

RECOMMENDATION 4:
• Amend Schedule 1 to the CCZ to include a plan for each precinct which shows streets and lanes (noting this should be updated following precinct planning).
• Ensure Precinct Planning refines laneway design through:
  - Refine the preferred number and location of laneways.
  - Nominate the different types of laneways and their roles.
  - Define laneway cross sections.
  - In Montague South, determine requirements for widening of existing laneways.

RECOMMENDATION 5:
• Include a map of key sites, landmarks and gateways in the MSS at Clause 21.06-8 to guide built form outcomes and include policy direction for these sites which identifies their significance and key considerations.
• See Recommendation 15 requiring design panels and design competitions for key sites.

RECOMMENDATION 6:
• Develop and use consistent definitions of low, mid and high rise and include them in the MSS at Clause 21.06-8.
• Include clear definitions of building typologies in the MSS at Clause 21.06-8.
• Amend the Clause 21.06-8 to include a wider selection of built form typologies including narrow lot buildings, block buildings (including T and L shaped blocks), slab buildings (wide linear blocks) and row buildings to further diversify built form typologies delivered.
• Amend Clause 21.06-8 to provide more specific guidance around the character to be delivered in precincts and sub-precincts, and address gaps in guidance to decision making on discretionary building controls and land use, including:
  - outlining the location and intended character of core retail areas
  - describing the preferred built form character and the interaction of development with the public realm (key streets and open spaces), heritage and character buildings and bridges
  - describing the preferred streetscape character and level of street enclosure sought
  - identifying and providing guidance for the reuse / adaptation of heritage and character buildings
  - ensuring that a consistent level of guidance is provided in each precinct and sub-precinct to guide preferred character and land use, having regard to matters such as building massing, height, relationships between buildings, heritage buildings, street wall heights, setbacks, site coverage and other built form elements.

RECOMMENDATION 7:
• Limit the extent of Floor Area Uplift (FAU) to promote diverse building typologies are delivered.
• Amend the CCZ1 and DDO30 to reinforce the relationship between density and built form controls to ensure that it is clear that FAR and FAU must also meet the preferred built form outcomes.

RECOMMENDATION 8:
• Reduce the scale of high rise and encourage a diversity in building typologies such as hybrids in Wirraway Core (see changes to building heights and street walls).
• Amend the building separation controls in DDO30 to clarify how the separation distances apply to developments on the same site.
• Amend the site coverage requirements in DDO30 to allow communal open space above street level, but with access to street level (see Recommendation 14).

• Amend DDO30 to limit mid-rise building lengths to a maximum of 50m for residential buildings through the provision of through block links or separation between buildings, except for north of Sandridge where campus buildings should be encouraged.

• Amend DDO30 to require that above ground car parking is sleeved and integrated into the building.

• Amend DDO30 to clarify the requirements for upper level setbacks above street walls on laneways and side and rear setbacks between upper levels above the street wall within a site and on abutting sites (see Recommendations 11 and 12).

• Ensure laneway widths are adequate to provide rear vehicular access to sites.

RECOMMENDATION 9:

• Amend DDO30 to include a discretionary requirement to create slender well-proportioned towers by applying the following maximum dimensions to developments of 13 storeys and higher (i.e. high rise development):
  - Residential buildings: a maximum tower dimension along one frontage of 50m and a maximum floorplate of 1,250sqm.
  - Non-residential buildings: a maximum tower dimension along one frontage of 75m and a maximum floorplate of 2,500sqm.

• Amend DDO30 to promote well-designed slender towers by including a requirement that towers are designed as three carefully integrated parts: a base building, middle, and top.

RECOMMENDATION 10:

• Support changes proposed in the Minister’s Part A submission to DDO30 that clarify that 8 storey street wall heights apply to streets of 23m or greater in width.

RECOMMENDATION 11:

• Amend DDO30 to require that where a street wall is required on a laneway, upper level setbacks are measured from that street/laneway frontage and not the centreline of the laneway.

• Amend DDO30 to specify that the street wall that is applicable to abutting properties should also apply to the frontages of any development abutting or adjoining existing and proposed public open space, unless overshadowing controls apply.

• Amend the controls to address instances where two different street wall heights meet, as proposed in the Minister’s Part A submission.

RECOMMENDATION 12:

• Amend the requirement for walls on a side or rear boundary in DDO30 for buildings up to 10 storeys to allow building services / lift core to be located on the boundary.

• Amend the side and rear setbacks which apply above 23m (6 storeys) to a maximum 10 storey building to a minimum 3m setback for non-habitable rooms and 9m for habitable rooms.

RECOMMENDATION 13:

• In addition to Council’s recommended changes to Clause 22.15 in its Stage 1 submission, include the following:
  - Include an exemption in DDO30 that where land is subject to inundation or in a Special Building Overlay, the overall building height or mandatory street wall height may be increased by the minimum floor level determined by the relevant drainage authority.
  - Include assessment criteria which allows overall building heights (including for plant and equipment) to be exceeded by the minimum floor level determined by the relevant drainage authority.
  - Include a requirement that lanes that will be vested in Council must be provided at natural ground level and should not be ramped.

RECOMMENDATION 14:

• In DDO30, in Site Coverage, specify that site coverage is based on the net developable area and not gross developable area of a site.

• Amend the requirement to allow communal open space to be provided on the ground or first level of a development, providing there is direct access from street level.

RECOMMENDATION 15:

• Change the reference in Clause 22.15 from ‘design excellence’ to ‘design quality’ so that there is a more tangible link to local and state policy and include additional items including:
  - consideration of the site and surrounding context and the impact new development will have on the urban realm
  - innovation in design and construction methods
  - innovative development models and sustainable...
building design
- architectural quality
- effective use of resources
- high-quality materials
- integration of building services
- building adaptability.

• Amend policy and DDO30 to:
  - Require that development and place making proposals for identified key sites and locations are assessed by an expert panel prior to lodgement.

Require that a design competition is held for landmark sites at Ingles Street Triangle, Sandridge Arts and Culture Hub and Civic Square, the Wirraway Sport and Recreation Hub and the Montague Sport and Recreation Hub.

RECOMMENDATION 16:
• Amend DDO to include:
  - A reference to heritage in the DDO objectives.
  - Heritage considerations in the Built Form Outcomes for heights, street walls and upper level setbacks, separation distances site coverage and active frontages.
  - The following requirements:
    - Promote the retention of heritage places in Fishermans Bend, including adaptive reuse.
    - The design of new buildings should respect the character, height, scale, rhythm, materials and proportions of heritage places.
    - New buildings should step down in height, massing and scale to adjoining lower scale heritage places.
  - Encourage the retention and adaptive re-use of character buildings. Noting the policy would need to include the appropriate map showing these properties.
## 6.0 Appendix 1. Built form modelling assumptions

<table>
<thead>
<tr>
<th>Issue</th>
<th>Assumptions</th>
</tr>
</thead>
</table>
| Streets and Lanes            | • The DDO model used the location of streets and lanes based on the draft Framework.  
                                • The Preferred Outcome model includes some changes to this layer eg new north-south lanes and the deletion of some east-west lanes.                     |
| Floor to floor heights       | • 4m at the ground level and 3.8m for remaining floors in the podium.  
                                • Floor to floor heights above the street wall allow for 3.8m in commercial buildings (within Sandridge core areas).  
                                • Overshadowing controls are tested using 3.8m floor to floor heights within the proposed heights.                                               |
| Side and rear setbacks       | • Habitable interfaces are assumed in Wirraway (above the base building/podium).  
                                • A mix of non-habitable and habitable interfaces are generally used in other areas.  
                                • The Better Apartment Design Standards definition of what constitutes a habitable space is adopted. Non-habitable is assumed to include commercial uses.  
                                • Non-habitable interfaces are assumed for the base building (except in Wirraway).                                                                 |
| Site coverage                | • 100% site coverage for lower levels of the building/podium except for non-core areas of Sandridge and Wirraway.  
                                • 100% site coverage for properties less than 1,200m² gross developable area.                                                                 |
| Tower floorplates            | • All tower floorplates outside of the Core in Sandridge are residential.  
                                • In the DDO model, residential floor plate sizes of 30x75m (2,250m²) and commercial floorplates of 3,000m².  
                                • In the Preferred Outcome model, residential floorplates of 25x50m (1,250m²) and commercial floorplates of 2,500m² were modelled.  
                                • Minimum building widths, depths and floorplate sizes were derived from a combination of assumptions taken from the Urban Design Strategy, Better Apartments Design Standards and Guidelines, Hayball’s built form testing of Amendment C270 and benchmarking of residential applications in Fishermans Bend and commercial projects within the City of Melbourne. |
| Car parking                  | • Car parking is assumed to be located above ground (due to soil conditions).                                                                                                                             |
| Public Open Space            | • In the DDO model open space was modelled based on the draft Framework.  
                                • In the Preferred model, open space was modelled on a combination of the draft Framework and additional open spaces proposed by Council.                                                    |
<table>
<thead>
<tr>
<th>Issue</th>
<th>Assumptions</th>
</tr>
</thead>
</table>
| Street walls and upper level setbacks | - As per DDO30, 4 storey street walls on laneways < 12m, 6 storey street walls on streets >12m and 8 storey street walls on identified sites on streets >23m were modelled in the DDO.  
  - In the preferred, a variety of street walls were modelled.  
  - Where two different street walls intersect, the higher street wall height was applied to the corner.  
  - Building depths were assumed to be either 10m deep for single loaded or 20m deep for double loaded corridors.  
  - Upper level setbacks were applied from the property boundary. |
| Location and width of laneways | - DDO model uses laneways as per the draft Framework (1st model)  
  - Preferred outcome applies laneways every 50m in Core Areas and every 100m in Non-Core Areas as outlined in policy at Clause 22.15.  
    - 9m wide laneways were assumed for Sandridge, 9 and 12m lanes for Wirraway and Montague.  
    - Laneways were generally located on larger sites. |
| Land ownership               | - Adjoining sites with the same owner were treated as one development site. |
| Approved planning permits    | - Approved planning permits are included in DDO model but not in the preferred outcome. |