



# Macauley Feasibility Study – COVID-19 update for 2021

Report for the City of Melbourne

11 October 2021





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# Contents

|     |                                                              |    |
|-----|--------------------------------------------------------------|----|
| 1.  | Introduction.....                                            | 1  |
| 1.1 | Purpose.....                                                 | 1  |
| 1.1 | Development feasibility .....                                | 1  |
| 1.2 | Approach and report outline .....                            | 2  |
| 2.  | A new context.....                                           | 3  |
| 2.1 | Arden-Macaulay Structure Plan.....                           | 3  |
| 2.2 | Macaulay Structure Plan refresh .....                        | 4  |
| 2.3 | The advent of COVID-19 .....                                 | 4  |
| 3.  | Development scenarios .....                                  | 7  |
| 3.1 | Study sites .....                                            | 7  |
| 3.2 | Existing use value.....                                      | 8  |
| 3.3 | Development specification .....                              | 9  |
| 3.4 | Property market and development assumptions .....            | 11 |
| 3.5 | Development floorspace .....                                 | 11 |
| 3.6 | Sensitivity tests and alternative development scenarios..... | 12 |
| 4.  | Feasibility test results .....                               | 13 |
| 4.1 | Base case results.....                                       | 13 |
| 4.2 | Sensitivity tests and alternative development scenarios..... | 14 |
| 5.  | Conclusions.....                                             | 17 |
| 5.1 | Findings .....                                               | 17 |
| 5.2 | Implications .....                                           | 18 |
| 5.3 | Limitations.....                                             | 20 |

# 1. Introduction

## 1.1 Purpose

The City of Melbourne has commissioned SGS Economics and Planning and m3property to provide an update of previous feasibility development testing on sites in the Macaulay precinct in 2019 and 2020.

The past analysis found that development was feasible under various market conditions, development scenarios, planning controls and sensitivity tests. However, since those results, the COVID-19 pandemic has created the greatest shock to the global economy since the war time era of the early 20th century.

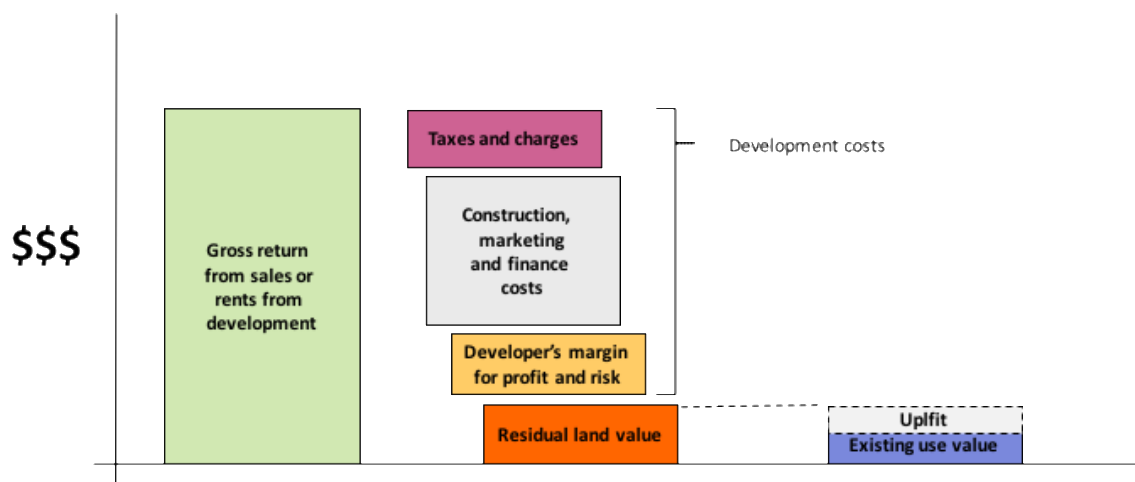
COVID-19 has brought large and heterogenous impacts on the property and urban development markets across Greater Melbourne. This report provides new development feasibility analysis for Macaulay which captures the current impacts of COVID-19 as well as revised planning controls being considered by Council.

## 1.1 Development feasibility

Development feasibility analysis compares costs and revenues of a hypothetical development to determine if the project would be financially viable. A key test for financial viability is to compare the residual land value (RLV) from a hypothetical development with the existing use value (EUV) of the site in question.

Residual land value (RLV) can be defined as the maximum amount a rational developer will pay a seller for a site for redevelopment. RLV is estimated by deducting the anticipated development costs from the anticipated revenues. This is shown conceptually in Figure 1.

**FIGURE 1: RESIDUAL LAND VALUE AND EXISTING USE VALUE**



Source: SGS Economics & Planning

A development is financially viable if the RLV is higher than the existing use value (as shown on the right hand side of Figure 1). Under such circumstances the existing land owner could sell their land to a developer for a price that exceeds the EUV.

In general, the larger the margin between the EUV and the RLV, the more likely it is that redevelopment will occur. The larger this margin, the more incentive there will be for existing owners to sell their land for development, or to develop the land themselves to realise this land value increase.

## **1.2 Approach and report outline**

In approaching this study, SGS undertook the strategic review, while m3property undertook the technical market and feasibility analysis. Together, we worked with council to review the development sites, prepare and test development scenarios, run sensitivity tests and discuss the implications for development in Macaulay.

This report captures that process and is set out in the following three sections:

- Section 2 discusses the new urban development context with the COVID-19 pandemic and the new amendment in light of past planning scheme changes in the precinct
- Section 3 describes the development scenarios tested in the feasibility analysis
- Section 4 explores the results of the analysis and sensitivity tests
- Section 5 draws conclusions from the discussion and findings.

## 2. A new context

### 2.1 Arden-Macaulay Structure Plan

Adopted in 2012, the Arden-Macaulay Structure Plan provided a long-term strategy and framework to guide change in the area. The Plan was developed following identification of Arden and Macaulay as an urban renewal area within the City of Melbourne's Municipal Strategic Statement, and one that would accommodate significant future growth.

The vision set out in the Structure Plan is for Macaulay to develop as "a dense, mixed-use, inner-city suburb while protecting key industrial sites". The Structure Plan outlined the preferred land use, building design, and open space, transport and infrastructure outcomes for Arden-Macaulay, and forecast a total of 22,500 jobs and 20,500 residents by 2040.

Amendment C190 implements new land use and development controls as recommended within the Arden-Macaulay Structure Plan. The controls:

- Encourage residential development,
- Encourage a new local shopping centre along Macaulay Road,
- Encourage a new business centre on Racecourse Road, and
- Provide a buffer between Allied Mills and new residential uses to its north.

In 2017, the Minister for Planning approved Part 1 of Planning Scheme Amendment C190 with changes. This included placing a two-year expiry date until 30 September 2019 over the amended area and built form requirements. The interim controls were subsequently extended until 30 September 2021.

In addition to approval, the Minister identified specific improvements to the planning controls for Macaulay and items requiring further investigation, including:

- Provision of affordable housing, in line with the policy within the Arden-Macaulay Structure Plan 2012 and the State Government's *Homes for Victorians*
- Housing and employment growth necessary to support the government's significant investment in public transport infrastructure and opportunities achieved through site consolidation and master planning
- Better management of density through development of a Floor Area Ratio control, and potential to maximise development outcomes in exchange for public benefit through a Floor Area Uplift and public benefits schedule
- Potential Melbourne Water flooding requirements
- Viability of development necessary to fund development contribution infrastructure requirements.

## 2.2 Macaulay Structure Plan refresh

The Macaulay Structure Plan refresh responds to the Minister for Planning's request to review the interim planning controls for Macaulay. It also responds to changes in the planning context that affect the area. These changes include:

- Separation of the Arden and Macaulay planning processes
- Commencement of construction for the Metro tunnel
- Revision of population and employment forecasts in 2020 (and again in 2021)
- New approaches to flood mitigation
- Preparation of a detailed development contributions plan
- Affordable housing needs are now better understood through council's *Affordable Housing Strategy 2020-2030*.

In response to these changes a discussion paper on the refreshed structure plan was released for public consultation in November 2019. Following feedback from the community and stakeholders, the Macaulay Draft Structure Plan Refresh was released for consultation in July 2020.

The refreshed Structure Plan is now at the finalisation stage. The development scenarios tested in this analysis reflect the development controls in consideration at the finalisation stage, particularly with new Floor Area Ratios (FARs), flooding mitigation contributions, affordable housing requirements and the mix of residential and non-residential floorspace required to meet to the mixed use vision for the precinct.

## 2.3 The advent of COVID-19<sup>1</sup>

The COVID-19 pandemic has shaken economies across the globe since early 2020 and its impacts are ongoing. At the time of writing, Melbourne had starting easing restrictions on its fifth set of stay-at-home orders (lockdowns), while Sydney is entering its tightest restrictions since the start of the pandemic. Domestic and global vaccination efforts will play a major role in determining how health impacts, local lockdowns and international border closures will impact society and the economy, both in the short and longer term.

In 2020, the public health responses of closed borders and restricted public activity caused an unprecedented loss of employment and economic output – the slowest national population growth since World War I. However, government stimulus, social safety-net measures, and the fact that the recession was not driven by underlying weakness in the economy or financial markets meant that, unlike typical recessions, the initial recovery was rapid once transmission was largely controlled.

There was a strong return of growth in late 2020 and early 2021 after the initial lockdowns, especially in the labour market. But it is unclear whether the economy can return so quickly from the recurring

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<sup>1</sup> For more detailed data on the impacts of COVID-19 discussed in this section, please refer to SGS's July 2021 report, *City of Melbourne Population and Jobs Forecasts 2020 – 2040*.

lockdowns currently faced in Sydney and Melbourne, the country's two biggest economies. Further, the City of Melbourne faces some particular challenges:

- It has experienced a deeper recession and slower recovery than the rest of Victoria and Australia;
- The abrupt cessation of international migration, particularly students, has had a large and spatially disproportionate effect on residential vacancy within the City of Melbourne;
- The rapid adoption of work-from-home practices during lock periods has resulted in a slower return to office workplaces and a spike in office vacancy rates; and
- Google mobility data shows that base activity levels have still not returned to 'normal' pre-COVID levels for the City of Melbourne.

As will be shown later in this report, for Macaulay, reduced demand means that revenues on residential and commercial developments are lower than pre-pandemic levels, reducing the overall feasibility of developments. Additionally, supply chain constraints have raised costs across the construction sector.

While these short term impacts are reasonably well understood, the longer term impacts are less clear. Some could positively impact the City of Melbourne, while others might be negative. Key factors influencing are described in the table below.

**TABLE 1: POTENTIAL LASTING IMPACTS OF COVID-19 ON THE CITY OF MELBOURNE**

| Factor                        | Negative impacts                                                                                                                                                                                                                                                                                                                                                                       | Positive impacts                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Population                    | Reduced population growth due to no/low overseas migration, reduced international tertiary student intake and a shift in housing type/location preferences away from small dense housing types/locations.                                                                                                                                                                              | A post pandemic rebound sees greater diversity in dwelling products being produced and a return of strong population growth seeking access to employment opportunities.                                                                                                                                                                                                                         |
| (Knowledge) office workers    | Slow economic recovery and increased uncertainty will create varied challenges for commercial service firms who will need to adapt and manage risk, potentially reducing investment and growth in the sector.<br><br>COVID-19 has accelerated trends in how/where people work leading to increased working from home and more dispersed/flexible workforce and office location models. | When people <i>do</i> attend an office post-pandemic it will increasingly be for a <i>purpose</i> – a meeting, addressing a complex/abstract problem, a desire to be in a quality environment. The Central City will continue to provide a competitive advantage for many of these factors and while work models may change, it will remain a preeminent destination for employment and living. |
| Retail and hospitality        | Retail and hospitality have been heavily impacted. While some businesses have not survived, other part of the retail sector have seen increased trading levels. The sector will take a long time to recover, will be highly dependent on how other sectors also recover and will never look the same as pre-COVID.                                                                     | Businesses that do adapt to online based opportunities will benefit from increasing market reach and the emergence of new retailing and hospitality models. This transformation will benefit from high levels of metropolitan connectivity and the broader knowledge economy.                                                                                                                   |
| Manufacturing and warehousing | Slow economic recovery and increased global uncertainty will create challenges for export oriented manufacturing and warehousing.                                                                                                                                                                                                                                                      | A shift from 'just in time' supply chains and a need for greater self-sufficiency could see increased local manufacturing and businesses holding more stock locally.                                                                                                                                                                                                                            |

Source: SGS Economics and Planning, 2021, *City of Melbourne Population and Jobs Forecasts 2020 – 2040*

For Macaulay, these influences are unlikely to significantly impact the overall development of the precinct in the long run. There will still be demand for additional residential and non-residential floorspace in Macaulay. It is the timing of that demand and associated development that is uncertain. How fast international migration returns to previous levels and will play a major role in that timing. Similarly, how widely work-from-home practices are adopted across workplaces will impact the demand for office space per worker and, in turn, the aggregate demand for office space. Additionally, the role of warehousing in servicing the growing 'just in time' delivery market may increase the value of existing uses in Macaulay, somewhat closing the gap between the value of industrial and residential/commercial uses and potentially delaying the urban renewal transition.<sup>2</sup>

Major renewal of the Macaulay precinct is not expected to start until the late 2020s and the majority of development is expected to occur between 2030 and 2040. The impacts of some of the factors above will have resolved prior to this point, with development trends returning to pre-pandemic levels. Other factors may mean that some development types are permanently slower. Others still, may actually bring forward development. Beyond the COVID recovery, future business cycles will bring more variation to the development and feasibility trajectory in Macaulay. Planning controls should be robust to these economic swings and encourage built form and land use outcomes consistent with the vision set out for the precinct.

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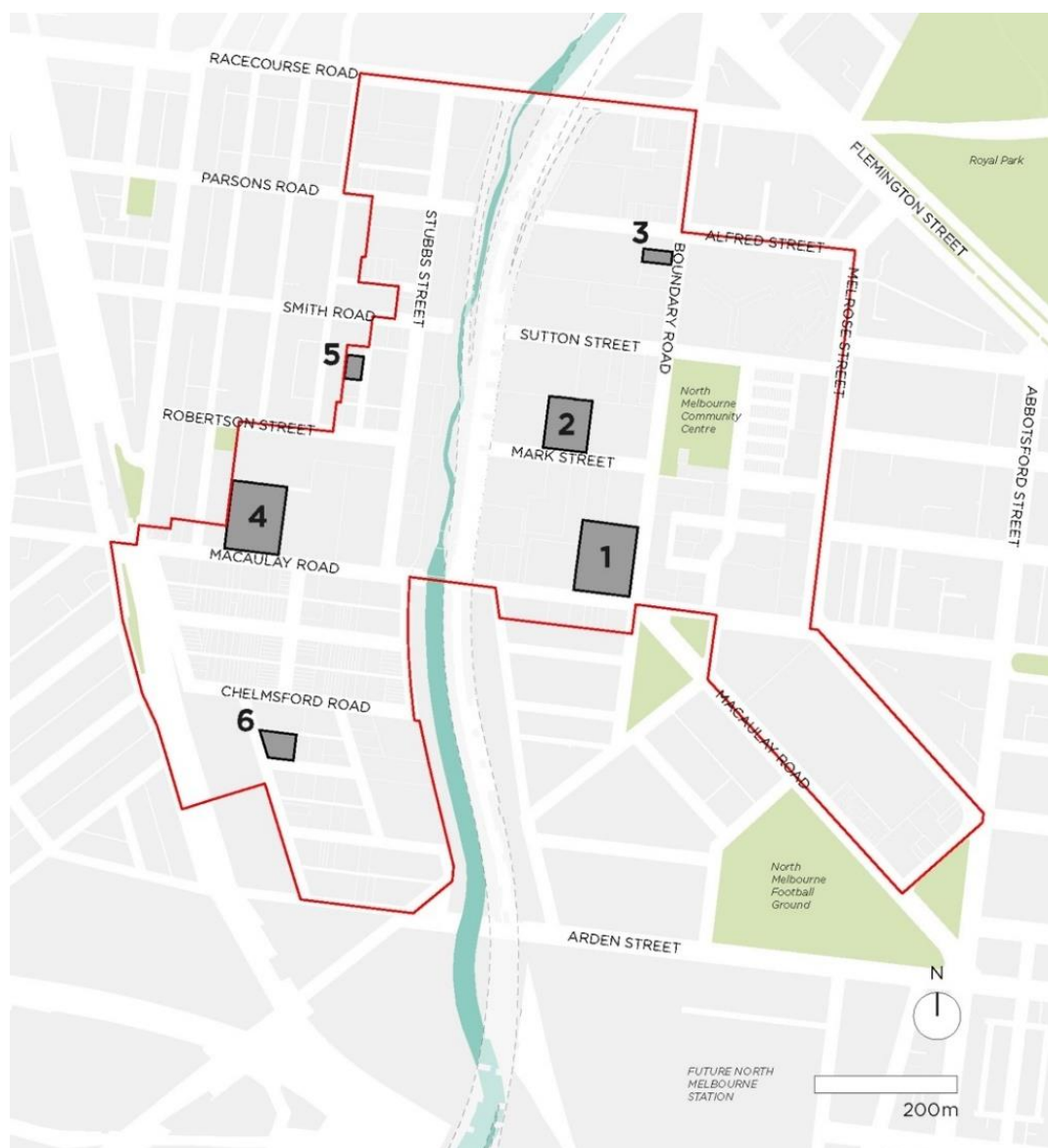
<sup>2</sup> If changes in market conditions mean there is a higher 'existing use value' on a site, there will be less of an incentive to develop the site into a different alternative use because the difference between income streams across the two uses will be smaller.

## 3. Development scenarios

### 3.1 Study sites

This updated feasibility analysis is based on the same six sites selected for the original feasibility analysis. These sites were selected to reflect a range of conditions in the precinct, including smaller and larger sites, sites in both Kensington and North Melbourne and all three zones in the precinct: C1Z, C2 and MUZ. No changes are proposed to the general residential zone in Kensington and therefore it is not considered in this report. Details of each site are provided in the table and map below.

**FIGURE 2: LOCATION OF FEASIBILITY TESTING CASE STUDY SITES**



Source: City of Melbourne, 2019

**TABLE 2: ATTRIBUTES OF FEASIBILITY TESTING CASE STUDY SITES**

| Site                           | Area      | Suburb          | Zone |
|--------------------------------|-----------|-----------------|------|
| Site 1: 218-246 Macaulay Road  | 7,808 sqm | North Melbourne | C1Z  |
| Site 2: 62-72 Mark Street      | 4,458 sqm | North Melbourne | MUZ  |
| Site 3: 83-89 Boundary Road    | 754 sqm   | North Melbourne | MUZ  |
| Site 4: 402-432 Macaulay Road  | 7,416 sqm | Kensington      | MUZ  |
| Site 5: 6-12 Thomson Street    | 782 sqm   | Kensington      | MUZ  |
| Site 6: 9-17A Elizabeth Street | 1,621 sqm | Kensington      | C2Z  |

Source: SGS Economics and Planning, 2021

### 3.2 Existing use value

EUV is the value of a site based on the assumption that the current activity continues in perpetuity. To estimate EUV, the net annual rental revenue derived from the current use is converted to a capital value using an appropriate capitalisation rate.

EUV for the six case study sites were estimated based on an assumed lettable area, an assumed rent per square metre and capitalisation rates, all of which are set out in the table below. The lettable area for each site was obtained through the City of Melbourne Interactive Map<sup>3</sup>. The capitalisation rates were provided by m3property and are based on observed relationships between net rents and sales values for industrial properties. The net rents were provided by m3property, based on desktop analysis of each site, their professional judgement and knowledge of similar property markets.

m3property notes that in comparison to the EUV assessment undertaken in March 2020:

- The rents remain unchanged. This is the overall neutral net effect of reasonable performance of the industrial market since the COVID-19 outbreak, contrasted with rent reductions in some B and C grade building (due to the impacts of COVID-19-related shutdowns on some smaller tenants).
- There has been a slight compression in yields due to increase industrial land values overall.

m3property also notes a limitation of assessing EUV is that it requires a high degree of professional judgement given that sales of industrial properties which have no regard to underlying land value are rare, especially within inner city locations such as North Melbourne and Kensington where land values are high.

Given the existing land uses are, relatively speaking, low value activities, this valuation approach is likely to generate the lowest site value estimates compared to other valuation approaches. The unweighted average EUV of site area across all six sites has been estimated at just over \$1,300 per square metre.

<sup>3</sup> City of Melbourne Interactive Map (<http://maps.melbourne.vic.gov.au/>)

**TABLE 3: EXISTING USE VALUES AND ASSOCIATED ASSUMPTIONS**

| Site                                | Lettable area (sqm) | Net rent per square metre | Capitalisation rate | Existing use value |
|-------------------------------------|---------------------|---------------------------|---------------------|--------------------|
| Site 1: 218-246 Macaulay Road (C1Z) | 5,336               | 60                        | 5.50%               | \$5,800,000        |
| Site 2: 62-72 Mark Street (MUZ)     | 8,882               | 50                        | 5.75%               | \$7,700,000        |
| Site 3: 83-89 Boundary Road (MUZ)   | 990                 | 80                        | 4.75%               | \$1,700,000        |
| Site 4: 402-432 Macaulay Road (MUZ) | 5,430               | 60                        | 5.50%               | \$5,900,000        |
| Site 5: 6-12 Thomson Street (MUZ)   | 669                 | 100                       | 4.50%               | \$1,500,000        |
| Site 6: 9-17A Elizabeth Street (C2) | 1,429               | 80                        | 5.75%               | \$2,000,000        |

Source: City of Melbourne, 2019; m3property, 2021

Note: Existing use values assume industrial land uses.

**TABLE 4: EXISTING USE VALUES PER SQUARE METRE**

| Site                                | Site area (sqm) | Existing use value /sqm |
|-------------------------------------|-----------------|-------------------------|
| Site 1: 218-246 Macaulay Road (C1Z) | 7,808           | \$743                   |
| Site 2: 62-72 Mark Street (MUZ)     | 4,458           | \$1,727                 |
| Site 3: 83-89 Boundary Road (MUZ)   | 1,095           | \$1,553                 |
| Site 4: 402-432 Macaulay Road (MUZ) | 7,416           | \$796                   |
| Site 5: 6-12 Thomson Street (MUZ)   | 782             | \$1,918                 |
| Site 6: 9-17A Elizabeth Street (C2) | 1,621           | \$1,234                 |
| <b>Average (all sites)</b>          |                 | <b>\$1,328</b>          |

Source: m3property, 2021

Note: Existing use values assume industrial land uses.

### 3.3 Development specification

The base case development scenario for the six sites is set out in Table 5 below. They consist of:

- FAR of 4:1 – building height limits have not been a direct consideration in this feasibility modelling but it is assumed the proposed FARs can be accommodated within acceptable height limits
- 80 per cent residential floorspace
- 20 per cent non-residential floorspace – this is further broken down into 4 per cent retail floorspace and 16 per cent commercial floorspace.

The City of Melbourne specified a range of planning requirements that apply to each of the identified development scenarios. These include parking, open space, developer contributions, draining charge and affordable housing contribution requirements. These are specified in Table 6.

Finally, an efficiency rate of 20 per cent was specified for the developments. That is, the share of gross floor area (GFA) that is dedicated to common services such as power, water and sewerage. This leaves 80 per cent of development floorspace for sale (net saleable area, or NSA).

**TABLE 5: BASE CASE DEVELOPMENT SCENARIOS**

| Site                           | Typology                                                                                                                                                                                                  | Floor area ratio (FAR) | Residential floorspace | Non-residential floorspace |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------|----------------------------|
| Site 1: 218-246 Macaulay Road  | <ul style="list-style-type: none"> <li>Multiple buildings</li> <li>Mixed use</li> <li>Through-block link</li> <li>Communal open space</li> </ul>                                                          | 4:1                    | 80%                    | 20%                        |
| Site 2: 62-72 Mark Street      | <ul style="list-style-type: none"> <li>Perimeter block / multiple buildings</li> <li>Mixed use</li> <li>Through-block link</li> <li>Communal open space</li> </ul>                                        | 4:1                    | 80%                    | 20%                        |
| Site 3: 83-89 Boundary Road    | <ul style="list-style-type: none"> <li>Multistorey mixed use</li> <li>High site coverage</li> </ul>                                                                                                       | 4:1                    | 80%                    | 20%                        |
| Site 4: 402-432 Macaulay Road  | <ul style="list-style-type: none"> <li>Multiple buildings</li> <li>Mixed use</li> <li>Lower built form near existing residential area</li> <li>Through-block link</li> <li>Communal open space</li> </ul> | 4:1                    | 80%                    | 20%                        |
| Site 5: 6-12 Thomson Street    | <ul style="list-style-type: none"> <li>Multistorey Mixed use</li> <li>High site coverage</li> </ul>                                                                                                       | 4:1                    | 80%                    | 20%                        |
| Site 6: 9-17A Elizabeth Street | <ul style="list-style-type: none"> <li>Multistorey commercial</li> <li>Setback from laneway</li> </ul>                                                                                                    | 4:1                    | 100%                   | 0%                         |

Source: m3property, 2021

**TABLE 6: PLANNING REQUIREMENTS FOR BASE CASE FEASIBILITY**

| Planning requirements            | Value    | Notes                             |
|----------------------------------|----------|-----------------------------------|
| Parking rate – residential       | 0.3      | Spaces per dwelling (basement)    |
| Parking rate – commercial        | 0.005    | Spaces per 100 sqm GFA (basement) |
| Open space contribution          | 7.06     | %                                 |
| DSS (special drainage charge)    | \$80     | sqm GFA                           |
| DCP interim rate – dwelling      | \$16,128 | per dwelling                      |
| DCP interim rate – commercial    | \$183    | per sqm                           |
| DCP interim rate – retail        | \$152    | per sqm                           |
| Affordable housing contributions | 6        | % of NSA or cash contribution     |

Source: City of Melbourne, 2021

Note: Affordable housing requirements were applied to residential floorspace only in mixed use developments (sites 1-5) and applied as a cash contribution to the fully commercial development (site 6).

### 3.4 Property market and development assumptions

Table 7 lists the key assumptions used in the base feasibility testing. In addition to those detailed below, m3property adopted construction cost assumptions from *Rawlinsons Construction Cost Guide* as well as standard industry assumptions for other costs such as selling, finance, agent and others. The profit and risk rate varies across sites according to the development size and land use type, with industry standards typically requiring a larger risk margin for larger sites.

**TABLE 7: KEY ASSUMPTIONS FOR BASE CASE FEASIBILITY**

| Assumption                         | Value   | Notes      |
|------------------------------------|---------|------------|
| Revenue – residential              | \$9,000 | sqm NSA    |
| Revenue – commercial               | \$5,500 | sqm NSA    |
| Revenue – retail                   | \$6,500 | sqm NSA    |
| Average apartment size             | 70      | sqm NSA    |
| Selling costs (residential)        | 4.25    | % of GRV   |
| Selling costs (commercial)         | 3.25    | % of GRV   |
| Profit and Risk (Site 5)           | 15.00   | % on costs |
| Profit and Risk (Site 3 and 6)     | 17.50   | % on costs |
| Profit and Risk (Sites 1, 2 and 4) | 20.00   | % on costs |

Source: m3property, 2021

### 3.5 Development floorspace

The development scenarios and assumptions above combine to result in the development floorspace in Table 8.

**TABLE 8: DEVELOPMENT FLOORSPACE**

| Site                           | Floor area ratio (FAR) | Residential NSA (sqm) | Non-residential NSA (sqm) | Dwellings | Parking spaces |
|--------------------------------|------------------------|-----------------------|---------------------------|-----------|----------------|
| Site 1: 218-246 Macaulay Road  | 4:1                    | 19,988                | 4,997                     | 286       | 111            |
| Site 2: 62-72 Mark Street      | 4:1                    | 11,412                | 2,853                     | 163       | 63             |
| Site 3: 83-89 Boundary Road    | 4:1                    | 2,803                 | 701                       | 40        | 16             |
| Site 4: 402-432 Macaulay Road  | 4:1                    | 18,985                | 4,746                     | 271       | 105            |
| Site 5: 6-12 Thomson Street    | 3:1                    | 1,501                 | 375                       | 21        | 8              |
| Site 6: 9-17A Elizabeth Street | 4:1                    | -                     | 5,187                     | N/A       | 26             |

Source: m3property, 2021

### 3.6 Sensitivity tests and alternative development scenarios

Variations on the base case modelling were run to test the sensitivity of the results to variations in market conditions and understand the relative impact of some of the key development factors. These tests were run on three sites only, given the similarities across the remaining sites.

#### *Sensitivity tests*

Two tests were run to understand the sensitivity of the feasibility to the underlying assumptions:

- Varying total costs and varying total revenues by 5 per cent, 10 per cent and 20 per cent
- Reducing the affordable housing requirements, whereby the developer receives 70 per cent or 50 per cent of the value of the contributed floorspace (compared to zero in the base case).

#### *Alternative development scenarios*

Two alternative scenarios were tested to better understand other forms of development that may occur in the precinct: a lower FAR and lower amount of non-residential floorspace in the developments. The development floorspace under a FAR 3:1 scenario is shown in the table below.

**TABLE 9: DEVELOPMENT FLOORSPACE WITH 3:1 FAR**

| Site                          | Floor area ratio (FAR) | Residential NSA (sqm) | Non-residential NSA (sqm) | Dwellings | Parking spaces |
|-------------------------------|------------------------|-----------------------|---------------------------|-----------|----------------|
| Site 1: 218-246 Macaulay Road | 3:1                    | 14,991                | 3,748                     | 214       | 83             |
| Site 2: 62-72 Mark Street     | 3:1                    | 8,559                 | 2,140                     | 122       | 47             |
| Site 3: 83-89 Boundary Road   | 3:1                    | 2,102                 | 526                       | 30        | 12             |

Source: m3property, 2021

A range of different mixes of residential and non-residential floorspace were tested in the second alternative scenario. In comparison to the base case of 80 per cent residential floorspace:

- For Site 1, a rate of 95 per cent was adopted
- For Site 2, a rate of 90 per cent was adopted
- For Site 3, there was residential floorspace only, given the likelihood that developers would seek to simplify the development on a small site and avoid a mixed use proposal.

The development floorspace under these scenarios is shown in the table below. Affordable housing contributions of 6 per cent of floorspace were applied to residential floorspace only.

**TABLE 10: DEVELOPMENT FLOORSPACE WITH REDUCED NON-RESIDENTIAL FLOORSPACE**

| Site                          | Floor area ratio (FAR) | Residential NSA (sqm) | Non-residential NSA (sqm) | Dwellings | Parking spaces |
|-------------------------------|------------------------|-----------------------|---------------------------|-----------|----------------|
| Site 1: 218-246 Macaulay Road | 4:1                    | 23,736                | 1,249                     | 339       | 108            |
| Site 2: 62-72 Mark Street     | 4:1                    | 12,839                | 1,427                     | 183       | 62             |
| Site 3: 83-89 Boundary Road   | 4:1                    | 3,504                 | 0                         | 50        | 15             |

Source: m3property, 2021

## 4. Feasibility test results

### 4.1 Base case results

The base case feasibility results are shown in the tables below. The mixed use developments in sites 1-5 return RLVs of between \$850 per sqm and \$1,280 per sqm of NSA. Higher RLVs in that range are found for the smaller sites (site 3 and 5) while the larger sites (sites 1, 2 and 4) have somewhat lower RLVs.

The lowest RLV is found for the fully commercial site 6 at \$308 per sqm of NSA. This reflects the weak conditions for commercial floorspace due to COVID-19 and, more generally, for how Macaulay compares to other competitor precincts near the CBD.

**TABLE 11: BASE CASE FEASIBILITY RESULTS**

| Site                           | Gross realisation value (GRV) | Residual land value (RLV) | RLV per sqm site area | RRLV per sqm NSA |
|--------------------------------|-------------------------------|---------------------------|-----------------------|------------------|
| Site 1: 218-246 Macaulay Road  | \$197,586,125                 | \$21,400,000              | \$2,741               | \$856            |
| Site 2: 62-72 Mark Street      | \$112,812,365                 | \$13,900,000              | \$3,118               | \$974            |
| Site 3: 83-89 Boundary Road    | \$27,709,632                  | \$3,900,000               | \$3,562               | \$1,113          |
| Site 4: 402-432 Macaulay Road  | \$187,666,330                 | \$22,100,000              | \$2,980               | \$931            |
| Site 5: 6-12 Thomson Street    | \$14,841,734                  | \$2,400,000               | \$3,069               | \$1,279          |
| Site 6: 9-17A Elizabeth Street | \$29,567,040                  | \$1,600,000               | \$987                 | \$308            |
| <b>Average</b>                 |                               |                           |                       | <b>\$910</b>     |

Source: m3property, 2021

A development is financially viable if the RLV is higher than the EUV. Under such circumstances the existing land owner could sell their land to a developer for a price that exceeds the EUV. Table 12 shows each of the mixed use developments (sites 1-5) have a ratio greater than 1. This suggests that the new developments would provide land owners with a significant increase in land value compared to retaining the site with an existing employment use, typical of the current activities in the precinct.

In contrast, the commercial site 6 has a ratio of 0.8, which implies that the costs of development and subsequent returns are not greater than the returns on the typical existing use for a C2Z site in the current market. This is related to the significant impact of COVID-19 on inner city commercial developments and is not likely to persist for the long term.

A further consideration is the value of the scenarios compared to development site sales in the inner northern metropolitan area. m3property's sales research indicates unencumbered site values of over \$6,000 per sqm of land for small sites (smaller than 1,000 sqm), decreasing to \$3,000-\$4,000 per sqm for larger sites (greater than 1,000 sqm). The RLVs in this analysis are below those site values and if vendors in Macaulay held similar price expectations, sites with the development requirements specified in this study would not be likely to transact in the short term. However, development prospects are likely to improve in the medium and longer term as infrastructure (including Arden Station) and nearby precincts are developed.

**TABLE 12: RATIO OF RLV TO EUV OF BASE CASE DEVELOPMENTS**

| Site                           | EUV         | RLV          | RLV: EUV    |
|--------------------------------|-------------|--------------|-------------|
| Site 1: 218-246 Macaulay Road  | \$5,800,000 | \$21,400,000 | 3.69        |
| Site 2: 62-72 Mark Street      | \$7,700,000 | \$13,900,000 | 1.81        |
| Site 3: 83-89 Boundary Road    | \$1,700,000 | \$3,900,000  | 2.29        |
| Site 4: 402-432 Macaulay Road  | \$5,900,000 | \$22,100,000 | 3.75        |
| Site 5: 6-12 Thomson Street    | \$1,500,000 | \$2,400,000  | 1.60        |
| Site 6: 9-17A Elizabeth Street | \$2,000,000 | \$1,600,000  | 0.80        |
| <b>Average</b>                 |             |              | <b>2.32</b> |

Source: m3property, 2021

## 4.2 Sensitivity tests and alternative development scenarios

### *Revenue and costs sensitivities*

The first sensitivity test was to vary the cost and revenue assumptions across the first three development sites by between 5 and 20 per cent. The results of these sensitivities are shown below. As expected, larger variations in costs and revenues have larger impacts on the underlying RLV, with the RLV being marginally more sensitive to revenue fluctuations than cost fluctuations.

In reference to the EUV's above, revenues would have to decrease by more than 10 per cent or costs increase by more than 10 per cent, for the development to become unfeasible (i.e. RLV less than EUV). This indicates that the feasibility of the base case development scenarios are robust to cost and revenue variations.

In reference to market sales of development sites, the larger sites (site 1 and 2) would require a 10 per cent increase to revenues or a 10 per cent reduction in costs for the RLV to broadly be in line with the estimated land value unencumbered, while the smaller site analysed (site 3), would require less of an increase in revenue/decrease in costs of 5 per cent, given the smaller development proposed.

**TABLE 13: RLV UNDER VARIABLE REVENUES**

| Site                          | -20%         | -10%         | -5%          | 0%           | 5%           | 10%          | 20%          |
|-------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Site 1: 218-246 Macaulay Road | -\$1,200,000 | \$10,100,000 | \$15,800,000 | \$21,400,000 | \$27,000,000 | \$32,600,000 | \$43,800,000 |
| Site 2: 62-72 Mark Street     | \$300,000    | \$7,100,000  | \$10,500,000 | \$13,900,000 | \$17,400,000 | \$20,800,000 | \$27,600,000 |
| Site 3: 83-89 Boundary Road   | \$400,000    | \$2,200,000  | \$3,000,000  | \$3,900,000  | \$4,800,000  | \$5,700,000  | \$7,200,000  |

Source: m3property, 2021

**TABLE 14: RLV UNDER VARIABLE COSTS**

| Site                          | -20%         | -10%         | -5%          | 0%           | 5%           | 10%          | 20%         |
|-------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| Site 1: 218-246 Macaulay Road | \$36,400,000 | \$28,900,000 | \$25,100,000 | \$21,400,000 | \$17,600,000 | \$13,900,000 | \$6,400,000 |
| Site 2: 62-72 Mark Street     | \$22,900,000 | \$18,400,000 | \$16,200,000 | \$13,900,000 | \$11,700,000 | \$9,500,000  | \$5,000,000 |
| Site 3: 83-89 Boundary Road   | \$6,200,000  | \$5,100,000  | \$4,500,000  | \$3,900,000  | \$3,300,000  | \$2,800,000  | \$1,600,000 |

Source: m3property, 2021

#### *Impact of lower affordable housing contributions*

The tables below report the results of reduced affordable housing contribution requirements, whereby the developer receives 70 per cent or 50 per cent of the value of the contributed floorspace (compared to zero in the base case). In each table, RLV 1 represents the base case value and RLV 2 represents the new value with the reduced requirement.

The reduced requirement results in an increased RLV, which is higher with a greater discount on the requirement. The average ratio of RLV to EUV lifts from 2.6 in the base case to 2.9 with a 50 per cent discount on the requirement and 3.02 with a 70 per cent discount. The range of impacts on the RLV is broadly around the same magnitude as a 5 per cent increase in revenues (or decrease in costs).

**TABLE 15: COMPARISON OF BASE CASE AND 50% DISCOUNT ON AFFORDABLE HOUSING CONTRIBUTIONS**

| Site                          | EUV         | RLV 1        | RLV 1: EUV  | RLV 2        | RLV 2: EUV  |
|-------------------------------|-------------|--------------|-------------|--------------|-------------|
| Site 1: 218-246 Macaulay Road | \$5,800,000 | \$21,400,000 | 3.69        | \$24,000,000 | 4.14        |
| Site 2: 62-72 Mark Street     | \$7,700,000 | \$13,900,000 | 1.81        | \$15,600,000 | 2.03        |
| Site 3: 83-89 Boundary Road   | \$1,700,000 | \$3,900,000  | 2.29        | \$4,300,000  | 2.53        |
| <b>Average Sites 1-3</b>      |             |              | <b>2.60</b> |              | <b>2.90</b> |

Source: m3property, 2021

**TABLE 16: COMPARISON OF BASE CASE AND 70% DISCOUNT ON AFFORDABLE HOUSING CONTRIBUTIONS**

| Site                          | EUV         | RLV 1        | RLV 1: EUV  | RLV 2        | RLV 2: EUV  |
|-------------------------------|-------------|--------------|-------------|--------------|-------------|
| Site 1: 218-246 Macaulay Road | \$5,800,000 | \$21,400,000 | 3.69        | \$25,000,000 | 4.31        |
| Site 2: 62-72 Mark Street     | \$7,700,000 | \$13,900,000 | 1.81        | \$16,200,000 | 2.10        |
| Site 3: 83-89 Boundary Road   | \$1,700,000 | \$3,900,000  | 2.29        | \$4,500,000  | 2.65        |
| <b>Average Sites 1-3</b>      |             |              | <b>2.60</b> |              | <b>3.02</b> |

Source: m3property, 2021

### *Impact of reduced FAR*

The table below shows the impact of a reduced FAR, from 4:1 to 3:1. Again, RLV 1 represents the value in the base case and RLV 2 represents the value under the reduced FAR.

Given the lower development potential with a reduced FAR, the RLVs are lower under this development scenario, while still remaining above the EUV. The average RLV falls from around 2.6 times the EUV to just under 2 times the EUV.

The impacts on the RLV are larger in scale than the reduced affordable housing requirements and broadly equivalent to a 5-10 per cent increase in revenues (or reduction in costs).

**TABLE 17: COMPARISON OF BASE CASE (FAR 4:1) AND LOWER FAR (3:1)**

| Site                          | EUV         | RLV 1        | RLV 1: EUV  | RLV 2        | RLV 2: EUV  |
|-------------------------------|-------------|--------------|-------------|--------------|-------------|
| Site 1: 218-246 Macaulay Road | \$5,800,000 | \$21,400,000 | 3.69        | \$16,000,000 | 2.76        |
| Site 2: 62-72 Mark Street     | \$7,700,000 | \$13,900,000 | 1.81        | \$10,400,000 | 1.35        |
| Site 3: 83-89 Boundary Road   | \$1,700,000 | \$3,900,000  | 2.29        | \$3,000,000  | 1.76        |
| <b>Average Sites 1-3</b>      |             |              | <b>2.60</b> |              | <b>1.96</b> |

Source: m3property, 2021

### *Impact of variable non-residential floorspace in development*

The table below shows the impact of different mixes of residential and non-residential floorspace on development feasibility. In comparison to the base case of 80 per cent residential floorspace:

- For Site 1, a rate of 95 per cent was adopted
- For Site 2, a rate of 90 per cent was adopted
- For Site 3, there was residential floorspace only.

Given the higher revenues associated with residential floorspace than commercial floorspace, each scenario results in a higher RLV than the base case and the impact is larger when there is a greater shift towards residential floorspace in the mix.

In terms of the magnitude of the impacts, changes to the underlying RLV from increasing the residential floorspace are smaller than the earlier sensitivity tests and alternative development scenarios. They are broadly equivalent to increasing revenues by less than 5 per cent.

**TABLE 18: COMPARISON OF BASE CASE AND ALTERNATIVE FLOORSPACE MIX**

| Site                          | EUV         | RLV 1        | RLV 1: EUV  | RLV 2        | RLV 2: EUV  |
|-------------------------------|-------------|--------------|-------------|--------------|-------------|
| Site 1: 218-246 Macaulay Road | \$5,800,000 | \$21,400,000 | 3.69        | \$23,700,000 | 4.09        |
| Site 2: 62-72 Mark Street     | \$7,700,000 | \$13,900,000 | 1.81        | \$14,900,000 | 1.94        |
| Site 3: 83-89 Boundary Road   | \$1,700,000 | \$3,900,000  | 2.29        | \$4,400,000  | 2.59        |
| <b>Average Sites 1-3</b>      |             |              | <b>2.60</b> |              | <b>2.87</b> |

Source: m3property, 2021

# 5. Conclusions

## 5.1 Findings

The purpose of this report is to provide an update of previous development feasibility studies in the Macaulay precinct. This update captures the current impacts of COVID-19 as well as revised planning controls being considered by Council.

The feasibility analysis compares costs and revenues in six hypothetical developments to determine if the project would be financially viable. We found that development is feasible in five out of six sites. That is, the RLV of the proposed development scenarios was greater than the current EUV on the sites. Development was feasible when there was a mixed use development in the MUZ or C1Z.

Development was not feasible in the current market for site 6 with a fully non-residential development (80 per cent commercial and 20 per cent residential). This is driven primarily by the weak market conditions for commercial floorspace in the current COVID-19 context that is affecting all inner city locations. For the Macaulay precinct in particular, there are other more attractive city fringe precincts available in the short term.

In comparison to the previous feasibility studies in 2019 and 2020, the development scenarios in this study were more marginal than previous analysis. There have been many changes to the development context in that time, with most of them having a negative impact on overall feasibility. They include:

- Lower revenues on residential, commercial and retail floorspace in the inner city (negative impact)
- Higher EUVs due to compressed yields in the ultra-low interest rate environment (negative impact)
- Consideration of a higher FAR than previous studies (4:1, compared to 3:1) (positive impact)
- Incorporation of affordable housing contributions into the base case development scenarios (negative impact)
- Other refinements to planning controls and development settings (mixed impacts).

The study included a range of sensitivity tests and alternative development scenarios:

- The cost and revenue sensitivities showed that the base case results are robust to fluctuations in market conditions
- The affordable housing sensitivity tests showed that discounted contribution requirements improve overall feasibility of development
- Reducing the FAR reduced the feasibility of development, although not sufficiently to lower the RLV below the EUV of the test sites
- Reducing the non-residential floorspace in the overall development mix improved the feasibility of development.

In order of magnitude, the reduced FAR has the largest impact on overall feasibility, followed by the affordable housing requirements and changing the use mix within the development floorspace. The projects remained feasible even with the impacts of the sensitivity testing, with RLV greater than EUV.

## 5.2 Implications

### *Feasibility of development*

The results above show that the development scenarios are feasible across most sites in the precinct. Existing use values in Macaulay are lower than the RLVs of the development scenarios.

A further consideration is the value of the scenarios compared to development site sales in the inner northern metropolitan area. The RLVs in this analysis are below those site values and, if vendors in Macaulay hold similar price expectations, sites with the development requirements specified in this study would not be likely to transact in the short term.

Relative to other comparable locations, two key factors in the development scenarios are contributing to lower RLVs than sales of other development sites: the significant affordable housing contribution requirement and the 20 per cent non-residential floorspace in the development mix in unfavourable post-COVID market conditions.

While this is informative, the expected timing of development of the precinct must also be considered. Major renewal activity in Macaulay is not expected until the Arden Station is developed. This should start in the late 2020s and continue through the 2030s. In this time, it is likely that there will be a recovery in the market for commercial floorspace in the inner city and the attractiveness of Macaulay as a mixed use precinct will improve, both due to infrastructure investment and the relative capacity and land prices of alternative development precincts.

Moreover, land values are (in part) dictated by the local land use controls, which can both increase and decrease the value of land in line with the development rights they afford. Land holders can only develop within the current controls, so the relevant test is whether the development rights in consideration (as defined by the scenarios in this study) result in a RLV that is greater than the EUV on the site. Over time, market expectations will adjust to meet the land value that the planning controls allow (which is equivalent to RLV) and, provided it still exceeds EUV, it will renew in the long term.

### *Impacts of COVID-19*

Looking over this longer term horizon, it is important to consider how the impacts of COVID-19 may play out. While the full impacts are still unclear, particularly while lockdowns are still happening around the country and the vaccination program is incomplete, there is not strong evidence of major long term impacts on the urban development economy. International migration will eventually return, which will spur a recovery of the inner city residential property markets. Workers will also continue to return to the CBD and other inner city precincts, albeit in lower numbers than expected before the pandemic.

The sensitivity testing of costs and revenues showed a degree of robustness of the feasibility for development of the precinct. Under current conditions, which are subdued due to COVID-19, feasibility is able to withstand shocks of up to 10 per cent on revenues or costs. This suggests strong development potential into the next decade, when the economy has recovered and the majority of development is expected to occur.

### *Mix of development*

It may be difficult to achieve the desired amount of employment floorspace under the proposed discretionary controls for non-residential floorspace. The feasibility analysis in this study has shown

that, when given the choice, commercial floorspace is unlikely to be desirable for developers. m3property has noted that this is especially true for the smaller sites that are not located along main roads, with limited customer exposure and access.

The relative pace of recovery of the residential and office property markets after COVID-19 may only add to this challenge. Pending the success of the vaccine roll out in Australia and overseas, there is a clear pathway for the return of strong population growth, particularly in the international student and skilled migrant cohorts that disproportionately settle in the City of Melbourne. In contrast, there will likely be permanently lower demand for employment floorspace (on a per worker basis) than expected before COVID-19. While this probably represents an acceleration of a pre-existing work-from-home trend, it could negatively impact the pace of development of employment precincts in the inner city.

Further work could also consider the intersection of affordable housing requirements on commercial floorspace and residential floorspace to ensure that there the requirements are not overly incentivising the development of residential floorspace.

### *Impacts of a lower FAR*

The results for the reduced FAR scenario suggest that locations where this control is applied are likely to take longer to develop than locations with a greater FAR. Given the suitable locations for a lower FAR are mostly going to be near the fringe of the precinct, this may not be an unattractive outcome when considering the overall development pattern and trajectory for the precinct.

### *Affordable housing requirements*

The results show that affordable housing requirements add a significant cost to development in the test scenarios. Despite this, development was still feasible across all mixed use sites. Nevertheless, should this be a serious concern, council may consider a discount on the contribution requirements, as this was shown to improve feasibility in the sensitivity testing, albeit marginally. Further consideration should be given to how affordable housing contribution rates are applied to different land uses (for example, residential versus commercial) to ensure equity and efficiency in the land development market.

### *Land transactions since C190*

As noted in the preceding feasibility studies, some changes to the planning scheme may be met with resistance from land holders in the precinct. This is because the introduction of controls that increase development costs or limit site development potential reduce the RLV of potential development, which can reduce the profitability of development and/or reduce the potential sale value of sites.

However, planning for the precinct should not be benchmarked against the protection or retention of past traded land values. There are a range of other considerations that should inform planning for the precinct (transport capacity, infrastructure capacity, flood risk and potential for mitigation measures, the availability of land for redevelopment, character and urban amenity considerations). Indeed, as outlined in the Macaulay Structure Plan Refresh (and Section 2 of this report), there have been several changes in the planning context which justify and require an update to the Planning Scheme.

There could also be particular concern for land holders who purchased sites since the gazettal of C190 in 2017 due to shifting land values between two successive planning scheme amendments. However, the controls in C190 were always interim controls. All of the key planning factors influencing feasibility

in the development scenarios above – floor area ratios, affordable housing contributions, land use mix and flooding controls – were specifically foreshadowed by the Minister for Planning upon the original approval of C190. Land holders of recently purchased sites have had notice of imminent planning changes and full opportunity to price that risk into land purchasing decisions.

In the case that market participants face lower RLVs than anticipated in their original land purchase (whether that is before or after C190), they will have three main options:

- Sell the site and accept a financial loss
- Develop the site but accept a lower level of profit as a result of paying a high price for the land, or
- Retain the site in anticipation of a future changes in the market that would see the sites RLV recover to the previous level.

Under the first two circumstances development will still take place. In the third, development will be delayed, however, there is a high likelihood the owner would either retain the existing use, or seek to attract an interim use, in order to derive an income from the site in the intervening period.

Further, planning scheme and other regulatory changes are just some of a range of dynamic factors at play in any land development context. There are always some factors improving feasibility (relevant examples here include lower interest rates, higher FARs and the development of Arden Station), while others diminishing it (for example, COVID-19).

The interplay of these factors over time will determine the optimal time for land holders to develop their site. As noted, most development in Macaulay is expected to occur after 2030 and there will be many more shifts in the development context between now and that time. The sensitivity testing showed that current feasibility is reasonably robust to shocks and further that only modest improvements in expected revenues would be required for the development scenarios in this report to align with current development sites in inner Melbourne.

### **5.3 Limitations**

The feasibility analysis in this project is based on high-level assumptions about development costs and revenues that have been applied across all sites and development types. The actual costs and revenues for specific developments will vary on a site by site basis.

This modelling has not had the benefit of specific designs for each site and proposed building height. The net lettable floor space in each scenario has been generated by multiplying the notional floor area ratio by the building efficiency (ratio of gross floor space to net lettable floor space).

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