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1. INTRODUCTION

Willoughby City Council (Council) are seeking to position the Chatswood CBD for employment and residential growth over the next 20 years, capitalising on the location and accessibility of the centre. To do this, Council has prepared and approved a Chatswood CBD Planning and Urban Design Strategy to 2036 that responds to changing market dynamics, including major residential development in commercial centres and the impact of commercial centres such as Macquarie Park and Sydney Olympic Park. The Strategy proposes the extension of the Chatswood CBD to the north and south along the North Shore railway line, as well as to change the allowable floor space and height controls applying to the B4 Mixed Use Zone.

As part of the proposed changes to principal planning controls, a minimum 1:1 non-residential component would be required as part of any development in the B4 Mixed Use zone in Chatswood, including within the extensions of the CBD. Department of Planning, Industry and Environment (DPIE) have requested additional information regarding the feasibility of including extensive B4 Mixed Use areas with a minimum stipulated 1:1 FSR in an extension to the CBD.

SGS Economics and Planning has been commissioned by Council to analyse the prospects of mixed use development in the B4 zone with a non-residential component in response to queries by the NSW Department of Planning, Industry and Environment. The scope of this study includes to:

▪ Deliver a report analysing the feasibility of a 1:1 FSR non-residential component for proposed B4 mixed use extensions, in the context of CBD strategy intention to extend the non-residential and commercial floorspace opportunities,
▪ Factor in the likely success of the commercial component throughout the extended CBD by reviewing the current and expected future commercial market conditions that are impacting Chatswood CBD,
▪ Assess whether the 1:1 FSR minimum control would have an adverse impact on the viability of the B3 commercial core to 2036, and
▪ Make recommendations and any suggested modifications to the proposed controls.

1.1 Structure of this report

This report contains the following sections:

Chapter 2 contains an analysis of the property market in Chatswood and the policy context and assesses what kinds of businesses would be likely to move into small offices built as part of mixed use developments.

Chapter 3 models the feasibility of mixed use development in the proposed extensions to the Chatswood CBD with varying amounts of commercial development.

Chapter 4 estimates the floorspace capacity and likely future floorspace demand in the Chatswood CBD.

Chapter 5 brings together conclusions from each of the previous chapters to comment on the suitability of a non-residential floorspace requirement in the proposed mixed use extensions of the Chatswood CBD.
2. CONTEXT

2.1 Policy context

Chatswood CBD Planning and Urban Design Strategy

The Chatswood CBD Planning and Urban Design Strategy aims to establish a strong framework to guide future development in the Chatswood CBD over the next 20 years. Its directions seek to facilitate office and residential growth as well as high quality urban design.

Proposed changes to the planning framework for the Chatswood CBD under the Strategy include:

- An extension of the CBD to the north and south along the Pacific Highway and North Shore Railway Line, with the extension areas to be zoned B4,
- Rezoning portions of the land in the CBD boundaries zoned R2, R3 and R4 to B4,
- Removing the maximum FSR for commercial developments in the commercial core, with maximum height limits to apply,
- Increasing the maximum FSR in the B4 zone to generally 6:1 subject to other considerations, and
- Require a 1:1 non-residential component in large mixed use developments.

FIGURE 1: PROPOSED LAND USES IN THE EXPANDED CHATSWOOD CBD

Source: Architectus 2018, Chatswood CBD Planning and Urban Design Strategy
NSW Government strategic land use plans

The high-level strategic planning context for the Chatswood CBD is provided by the NSW Government’s Greater Sydney Region Plan (GSRP) and North District Plan (NDP). The GSRP provides a 40-year vision for the development of Greater Sydney, which is aligned with long-term transport and infrastructure plans, while the NDP provides a bridge between the GSRP and local planning conducted by Councils. The NDP contains a series of planning priorities and actions which amendments to planning controls must be consistent with.

Chatswood is identified as one of the major centres and office markets in the Eastern Economic Corridor, which stretches from Sydney Airport to Macquarie Park and includes the Sydney CBD. The NDP discusses the importance of this corridor to Greater Sydney’s global competitiveness and aims to continue to grow its economy.

Chatswood is designated in the GSRP and NDP as a strategic centre. Under this designation, Chatswood is intended to continue to serve as a higher order employment and service centre and to host significant private sector investment and development. The strength of Chatswood’s retail and entertainment offering is also identified. A job target of between 31,000-33,000 is identified for Chatswood by 2036, an increase from the 2016 baseline of 24,700.

The NDP contains several actions to facilitate continued employment growth in Chatswood including:

- Protect and grow the commercial core,
- Maximise the land use opportunities provided by Sydney Metro,
- Promote the role of the centre as a destination for cultural and leisure activities,
- Promote and encourage connectivity, and upgrade and increase public open spaces,
- Investigate interchange operations on both sides of the railway line to increase capacity and efficiency of modal changes, and
- Improve pedestrian connectivity between the eastern and western side of the rail line.

Transport improvements

Proposed NSW Government transport infrastructure and service investment would improve the public transport and road accessibility of Chatswood, increasing its commercial appeal. These investments include:

- The Northern Beaches Link, which would make Chatswood the large commercial office market most accessible to large parts of the Northern Beaches,
- The Sydney Metro City and South-West, which would directly connect Chatswood with the inner south and south-west of Sydney and improve travel times to the Sydney CBD, and
- The Western Harbour Tunnel and Beaches Link, which would provide a motorway connection between WestConnex and the Warringah Freeway, increasing the road accessibility of Chatswood to the southern and western suburbs of Sydney.

2.2 Property market profile

The performance of the commercial office market in Chatswood compared to other nearby centres was profiled based on the following published commercial office market research:

- Metro Office Second Half 2019, Colliers International,
- North Short Office Market Overview September 2019, Knight Frank, and
- Sydney’s North Shore Office Market Update March 2019, CI Australia.

Indicators of the performance of commercial office markets in the North Shore region including the Chatswood CBD are shown in Table 1.
<table>
<thead>
<tr>
<th>Market</th>
<th>Grade</th>
<th>Total Stock (sqm)</th>
<th>Vacancy Rate (%)</th>
<th>Annual net absorption (sqm)</th>
<th>Avg net face rent ($/sqm)</th>
<th>Outgoings ($/sqm)</th>
<th>Average incentive (%)</th>
<th>Core market yield (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Sydney</td>
<td>Prime</td>
<td>290,424</td>
<td>10.2</td>
<td>4,205</td>
<td>822</td>
<td>140</td>
<td>21.1</td>
<td>4.75 - 5.25</td>
</tr>
<tr>
<td>North Sydney</td>
<td>Secondary</td>
<td>534,463</td>
<td>6.6</td>
<td>3,686</td>
<td>687</td>
<td>135</td>
<td>20.0</td>
<td>5.25 - 5.50</td>
</tr>
<tr>
<td>North Sydney</td>
<td>Total market</td>
<td>832,887</td>
<td>7.9</td>
<td>7,891</td>
<td>750</td>
<td>137</td>
<td>20.5</td>
<td>4.75 - 5.50</td>
</tr>
<tr>
<td>Crows Nest/St Leonards</td>
<td>Prime</td>
<td>102,699</td>
<td>1.8</td>
<td>13,302</td>
<td>608</td>
<td>130</td>
<td>21.0</td>
<td>5.25 - 5.75</td>
</tr>
<tr>
<td>Crows Nest/St Leonards</td>
<td>Secondary</td>
<td>204,928</td>
<td>9.4</td>
<td>-3,388</td>
<td>548</td>
<td>105</td>
<td>21.5</td>
<td>5.25 – 6.25</td>
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<tr>
<td>Crows Nest/St Leonards</td>
<td>Total market</td>
<td>307,627</td>
<td>6.9</td>
<td>9,914</td>
<td>575</td>
<td>120</td>
<td>21.2</td>
<td>5.50 – 6.00</td>
</tr>
<tr>
<td>Chatswood</td>
<td>Prime</td>
<td>157,412</td>
<td>3.6</td>
<td>4,688</td>
<td>571</td>
<td>132</td>
<td>21.1</td>
<td>5.25 – 6.25</td>
</tr>
<tr>
<td>Chatswood</td>
<td>Secondary</td>
<td>120,566</td>
<td>8.4</td>
<td>3,330</td>
<td>488</td>
<td>114</td>
<td>21.7</td>
<td>5.50 – 6.00</td>
</tr>
<tr>
<td>Chatswood</td>
<td>Total market</td>
<td>277,978</td>
<td>5.7</td>
<td>1,358</td>
<td>530</td>
<td>122</td>
<td>21.5</td>
<td>5.25 – 6.25</td>
</tr>
<tr>
<td>Macquarie Park</td>
<td>Prime</td>
<td>644,824</td>
<td>3.8</td>
<td>-1,713</td>
<td>405</td>
<td>100</td>
<td>22.0</td>
<td>5.50 – 6.00</td>
</tr>
<tr>
<td>Macquarie Park</td>
<td>Secondary</td>
<td>214,210</td>
<td>8.3</td>
<td>-2,209</td>
<td>335</td>
<td>100</td>
<td>24.0</td>
<td>6.00 – 6.50</td>
</tr>
<tr>
<td>Macquarie Park/North Ryde</td>
<td>Total market</td>
<td>859,034</td>
<td>4.9</td>
<td>-3,922</td>
<td>385</td>
<td>100</td>
<td>23.0</td>
<td>5.50 – 6.50</td>
</tr>
</tbody>
</table>

Source: Knight Frank Research 2019

Chatswood has a comparatively low vacancy rate for its prime (premium and A) grade office stocks (3.6% as of July 2019), and higher vacancy rate for secondary (B, C and D) grade office stocks (8.4% as of July 2019). Leasing activity is reported to be strong, with shortages for tenancies under 300 sqm, and an expectation that rents will increase in the near future as a result. Incentives for B grade offices are approximately 15% Gross, with A grade incentives at approximately 19% as of early 2019\(^1\). Chatswood’s core market yield is competitive to other centres in the North Shore office market at 5.25% to 6.25% for prime stocks and 5.5% to 6% for secondary stocks.

The annual net absorption rate for secondary grade office stock is a decrease of 3,330 sqm, this is consistent with most of the other places in the North Shore area, such as Macquarie Park with a decrease of 2,209 sqm, and Crows Nest/ St Leonards with a decrease of 3,388 sqm. An exception to this decrease in the annual net absorption of secondary grade office spaces is North Sydney. North Sydney has lower vacancy rate for secondary grade offices (6.6%) and higher vacancy rates for prime grade offices (10.2%).

It is generally expected that office demand in Chatswood will remain strong. Some of the locational drivers that have been cited in major tenant relocations were strong amenity, good transport connections to Sydney CBD and other centres, and comprehensive retail offerings.

\(^1\) Sydney’s North Shore Office Market Update March 2019, CI Australia 2019
Real estate agent consultation

Commercial real estate agents active in the Chatswood area from the following agencies were interviewed regarding the current and likely future performance of the Chatswood office market:

- CBRE,
- Colliers International, and
- Knight Frank.

The following themes emerged from this consultation.

**Chatswood’s commercial market**

Chatswood’s commercial property market is tightly held with relatively low vacancy rates. Rents are slightly lower than those in North Sydney or St Leonards, making Chatswood slightly more affordable and reflecting its increased distance from the Sydney CBD and slightly older building stock.

Commercial floorspace is highly concentrated, and the commercial core area is performing particularly well. These is a shortage of A grade commercial office space, partly as a result of the very limited commercial development over the past 30 years. Commercial and retail floorspace further from the Chatswood train station and away from the main centre of activity on Victoria Avenue is more difficult to find tenants for.

Chatswood was generally seen to attract different kinds of tenants than other nearby centres. St Leonards has a strong focus on health, and large medical businesses were stated to be likely to stay in St Leonards. North Sydney currently has a stronger offering for large corporate businesses than Chatswood, partly as a result of the lack of recent A grade office development in Chatswood, although Chatswood does accommodate some large commercial tenants. There are a large number of smaller strata office suites in Chatswood, which house population-serving businesses.

**Locational drivers of smaller firms**

Several locational drivers leading businesses to locate in Chatswood were identified. These include:

- Good public transport connectivity,
- Cheaper rent than some other large office markets including North Sydney, St Leonards and the Sydney CBD,
- Proximity to where workers and business owners live on the North Shore,
- Proximity to other commercial tenancies and uses, and
- A vibrant retail offering and good amenities, making Chatswood an attractive location to work.

**Opportunities**

While some agents’ advice was that large commercial businesses could be reluctant to shift from North Sydney or similar locations to Chatswood, an unmet demand was identified for premium or A-grade office space within the commercial core. This was seen to present an opportunity for expansion of employment, with Chatswood identified as a popular location for work for people living in the North Shore area.

Chatswood was also identified as a good location to build hotels for business travellers given its large office market, amenity and public transport proximity to other large office markets including Macquarie Park, North Sydney, St Leonards and the Sydney CBD.

Population growth was highlighted as a potential opportunity, with growth expected in small firms and population serving industries to cater to people moving to the area. This will create demand for more small office spaces.
Challenges

Agents highlighted potential challenges to leasing out commercial tenancies in proposed mixed use developments. Businesses prefer to co-locate with other businesses so the presence of significant amounts of residential development could constrain the attraction of large corporate tenants if the residential development is not well designed. There is a need for a commercial atmosphere and sense of address, particularly for larger corporate clients. Businesses are also reluctant to deal with strata committees composed primarily of residential apartment owners.

Recommended uses for B4: Mixed Use zone

Agents highlighted the following examples of businesses which could be appropriate for mixed use developments in the B4 zone:

- Hotels,
- Gyms and other leisure facilities,
- Population services like childcare centres, medical clinics and tuition services,
- Retail spaces
- Offices for small and population serving businesses

2.3 Mixed use case studies

Several centres with both commercial core and mixed use zones were profiled to determine what kinds of businesses and uses tend to locate in the commercial core area, and what kind tend to locate in the mixed use area. This provides a guide to how mixed use developments in the proposed extensions to the mixed use zone in Chatswood could perform.

Chatswood

The existing Chatswood CBD is shown in Figure 2. The B4 zone is smaller than the B3 zone and is located between it and the surrounding residential areas.

There are a variety of current uses in the B3 zone including:

- **Professional services**: Lbh Australia (shipping service), Ventia (infrastructure service provider),
- **Corporate headquarters**: Huawei Technologies, AARNet, PepsiCo Australia & New Zealand, The Smith’s Snackfood Company,
- **Peak industrial bodies**: Engineers Australia Sydney,
- **Hotels**: Mantra Chatswood, the Sebel Sydney Chatswood, Silkari Suites at Chatswood, and
- **Shopping centres**: Mandarin Centre, Westfield Chatswood, Chatswood Chase.

Current uses in the B4 zone are predominately smaller businesses including many that cater to the local population, however there are also large stand-alone premises. Examples of businesses in the B4 zone are:

- **Smaller professional services**: Valiant Real Estate
- **Smaller financial services**: Travelex, HSBC Bank Australia
- **Hotels**: Quest Chatswood, Meriton Suites
- **Student accommodation**: Iglu Chatswood
- **Tuition services**: Alliance Francaise de Sydney, Pre-Uni New College Chatswood, Universal KIDS, NumberWorks’nWords Chatswood
- **Community facilities and services**: Community centre, Baptist Church
- **Child care centres**: CMA Mental Arithmetic Chatswood, Swan Academy
- **Medical services**: Douglass Hanly Moir Collection Centre, Laverty Pathology, Hearing Australia Chatswood, Infinite Health. Anderson & Partners
- **Residential developments**: Dougherty Apartments, Chatswood Place (225 apartment units, 4,000 sqm of retail, dining and child care centre)
North Sydney

The North Sydney centre is shown in Figure 3. Similarly to Chatswood, North Sydney has a large B3 zone close to the Train Station, with the B4 zone is mostly located further from the train station.

Clause 4.4A of the North Sydney LEP 2013 applies to the B4 zones around North Sydney and requires a minimum non-residential floor space ratio and active street frontages in new developments. Most sites have a 0.5:1 requirement for non-residential floor space, including those which are relatively far from the North Sydney Station and commercial core.
Examples of current uses in B3 zone include:

- **Professional services**: Achieving Acumen (business management consultant), My Business Plus (marketing agency), Grange Business Partners (accounting firm), Learn to Trade Australia (educational consultant)
- **Corporate headquarters**: Nokia Solutions and Networks, BT Australasia, OncoSil Medical Limited
- **Peak industrial bodies**: NSW Business Chamber
- **Hotels**: Meriton Suites, Harbourview Hotel, Vibe Hotel, Quest North Sydney

Current uses in the B4 zone include:

- **Smaller professional services**: Robertson Jim (Financial consultant), I-View (Market researcher), IPSOS Australia (Market Research), Cockram (construction company)
- **Hotels**: Rydges North Sydney, Astra Apartments
- **Apartments with ground floor**: retail outlets and childcare centres
There are several examples of recent and proposed mixed use developments in North Sydney including:

- **SKYE, 211-223 Pacific Highway, North Sydney**
  An 18 storey mixed use development with two ground floor retail premises, some commercial premises on part of the first floor and residential development otherwise. It has a non-residential FSR of 0.5:1. The development has been completed and contains a café, boat hire office and gym.

- **The Miller, 221 Miller Street, North Sydney**
  A 22 storey mixed uses development including a large consolidated retail space on the ground floor, along with 100 serviced and 183 residential apartments. It replaces a 15 storey commercial building. There is a 3:1 non-residential development requirement for this site (the provisions applying to this site differ from those applying to surrounding sites, which have a 0.5:1 non-residential FSR requirement), which the development satisfies with the serviced apartment component. The retail component of the development has an FSR of approximately 0.35 when the site’s access handle is excluded.

- **231 Miller Street, North Sydney**
  A mixed use development containing a large ground floor retail space and 61 residential apartments. The retail space of 268sqm proves a non-residential FSR of approximately 0.51:1.

- **229 Miller Street, North Sydney**
  A mixed use development containing one level of commercial offices, an additional commercial/retail premise on the ground level and residential apartments. In the application documents the commercial offices are noted to be intended to be used as a childcare centre. The proposal provides 0.69:1 of non-residential floorspace in total.

- **168 Walker Street, North Sydney**
  A mixed use development with 440 residential units, as well as retail spaces on the ground floor and commercial office suites on the first floor. This proposal has a relatively large site area (4,898 sqm), and so the proposed retail and commercial premises provide a total non-residential FSR of 0.51:1.

There are some examples in North Sydney of horizontal mixed use across multiple different sites, with exclusively residential and commercial buildings located side by side. For example, a residential building at 2 Mount Street is located next to offices at 16 Mount Street and the Coca-Cola Amatil building on the intersection of Mount Street and William Street. While this does not provide a guide for potential development outcomes on a single site, it does indicate that this kind of proximity of commercial offices and residential uses is possible.

**Parramatta**

Parramatta’s centre is shown in Figure 4. There is a much larger area covered by commercial zones than in North Sydney or Chatswood, with a smaller B3 zone covering the area immediately north and south-east of Parramatta Station and a large B4 zone surrounding it.
The B3 zone is predominately composed of large commercial premises including government agencies in the Parramatta Place development.

There are a wide variety of uses in the B4 zone, including many in office buildings with no residential component. The uses in these locations do not reflect the possible uses in new mixed use developments. There are also parts of the mixed use zone that are almost exclusively residential.

Commercial uses in mixed use developments include music academies, small offices, local services (hair dressing, dry cleaning, gyms, accounting firms and medical centres), cafes and restaurants. These mixed use developments generally comprise ground floor non-residential uses with residential apartments above. Examples of mixed use developments are shown in Figure 5.
Burwood

The Burwood Town Centre is shown in Figure 6. The centre contains only a mixed use zone and no commercial core. Nonetheless, there are large commercial developments and a variety of mixed use developments within the Burwood Town Centre and so it provides an example of the kinds of commercial uses that could locate in a mixed use zone. The Burwood LEP sets a maximum residential FSR which is less than the maximum allowable FSR, and so mixed use developments in the Burwood Town Centre need to provide commercial floorspace to achieve the maximum available FSR.

Mixed use developments in the Burwood Town Centre include:

- 27 Belmore Street, a residential apartment development containing restaurants, a supermarket, retail shops and entertainment services such as karaoke,
- 1 Railway Parade: A residential apartment development with ground floor retail tenancies and first floor strata offices, including a travel agency, beauty clinic, architectural design consultancy, real estate services and law firm,
- 3 Railway Parade: a residential apartment development with retail tenancies on the ground floor and some other commercial premises including a hairdresser, gym, medical centre and Navitas English education centre, and
- 266-274 Burwood Road, a shop-top housing development at the southern end of the Burwood Town Centre containing an education centre, dentist, restaurant, real estate service and physiotherapist.

Mixed use developments generally have ground floor non-residential uses with one or more other floors of non-residential uses above the ground level. Examples of mixed use developments are shown in Figure 7.
FIGURE 6: THE BURWOOD TOWN CENTRE

Legend
- Burwood Station
- Land Zoning
  - Commercial Core
  - Mixed Use
  - Mixed use building examples

Source: SGS 2020
Findings

These case studies show that there is a diverse range of uses in mixed use zones throughout Sydney. In some cases, this is a result of the mixed use zone being created in an area which already contains large commercial buildings. However, more modern mixed use developments demonstrate that a range of retail, hospitality, small offices and local services are likely to locate in mixed use developments which contain substantial residential components.

There are relatively few examples of mixed use developments which contain large premium office floorspace in the same building as residential apartments. As noted by estate agents consulted for this study, large corporate tenants prefer to be located in exclusive commercial developments with a strong sense of address. However, there are some examples of horizontal separation of commercial and residential developments, with an example in the North Sydney case study.
3. FEASIBILITY MODELLING

This section contains the results of high-level modelling of the impact of non-residential floorspace on the development feasibility of a mixed use development. This is different to the market feasibility (otherwise known as the market depth), which is discussed in Sections 2 and 4.

3.1 Feasibility methodology

Development feasibility is typically assessed by comparing the residual land value (RLV) to the existing use value for a site. The RLV can be thought of as the maximum amount a rational developer would pay for a development site. RLV is estimated by deducting all development costs, including profit mark and a risk contingency, from anticipated development revenue. The amount leftover – the residual – could be capitalised into the value of the land. This is shown conceptually in Figure 8.

**FIGURE 8: RESIDUAL LAND VALUE APPROACH TO FEASIBILITY ANALYSIS**

A hypothetical development is considered to be feasible if the RLV is sufficient to entice a landowner to sell their site for redevelopment. Feasibility under an RLV model is usually reported with a ratio of RLV to current land value. If this ratio is 1.25 or greater, a developer could afford to pay a 25% premium on the existing land value to acquire a site for development. This means that a developer could afford to pay a premium to entice a landowner to sell a site for development and so development is reported to be feasible. The price premium would facilitate the amalgamation of sites for development.

A feasibility ratio of between 1 - 1.25 indicates that development may be feasible. At this feasibility ratio a developer would be able to make enough profit from a development to cover the cost of acquisition of the land if a landowner is willing to sell their land for a smaller price margin than 25%. However, as there is less room for a price premium in the event of an increase in land value, and developers may have difficulty amalgamating multiple sites. In this case, development is reported to be marginally feasible.

A feasibility ratio of less than 1 indicates that a developer would not make enough profit to make development viable.
Feasibility testing sites

Development feasibility was tested on four sites in the Chatswood CBD intended to represent a range of potential development site types and locations. In each case the sites are within the area proposed to be zoned for mixed use and to have a maximum FSR of 6:1 with a 1:1 non-residential development requirement.

The selected sites are listed below. The feasibility of mixed use development has been tested in each case assuming that development sites can be amalgamated where necessary and using the following development scenarios:

- No commercial development and 6:1 residential development,
- 0.5:1 ground floor retail development and 5.5:1 residential development,
- 1:1 non-residential development (comprising 0.3:1 retail and 0.7:1 office/services) and 5:1 residential development, and
- 1.5:1 non-residential development (comprising 0.3:1 retail and 1.2:1 office/services) and 4.5:1 residential development.

Site 1: Archer Street, Johnson Street and Bertram Street

This site is comprised of four properties which would need to be amalgamated to produce a large development site. Two of these properties contain detached residential dwellings and the other two contain 2-3 storey residential flat buildings.

The feasibility of development on this site illustrates the feasibility of mixed use development where the amalgamation of multiple residential properties with relatively low existing density is proposed.

Site 2: 16-22 Devonshire Street

This site contains a single large residential flat building which is strata subdivided and which contains 44 apartments. This building is nine storeys high and is characteristic of the existing large and relatively old residential flat buildings in the southern part of the Chatswood CBD.
The feasibility of development of this site provides an indication of whether these residential flat buildings would be feasible to be redeveloped. Development feasibility will be hampered by the high land price associated with the existing high density development of the site.

FIGURE 10: SITE 2 FOR FEASIBILITY TESTING

Site 3: 655A Pacific Highway

This site contains a three-storey residential flat building which is strata-subdivided and which accommodates 34 residential units. It is bounded by the Pacific Highway and the Chatswood Bowling Club. A frontage to the Pacific Highway would reduce the amenity of any residential or commercial development on this site.

There are several low-rise residential flat buildings in the proposed southern extension to the Chatswood CBD, which contains Site 3. The feasibility of development on this site provides an indication of feasibility in the southern extension area more broadly.
Site 4: 849-859 Pacific Highway and 2 Wilson Street

This site contains four walk-up style residential flat buildings accommodating a total of 36 apartments. As with Site 3, it is located on the Pacific Highway which would lower the amenity of a resulting development. However, this site is less isolated from commercial development than Site 3 as it is located immediately north of the developed commercial core of the Chatswood CBD (to the west of the railway line).

Assembling Site 4 for development would be relatively difficult as it contains multiple strata-subdivided residential flat buildings. However, the density of development is lower than on some of the other sites.
Assumptions

Table 2 below shows the cost inputs and assumptions used in the feasibility modelling.

**TABLE 2: COST INPUTS AND ASSUMPTIONS**

<table>
<thead>
<tr>
<th>Input</th>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction and demolition costs</td>
<td>Rawlinson’s Construction Handbook 2018</td>
<td>Varies</td>
</tr>
<tr>
<td>Property acquisition rate</td>
<td>Profiling of recent nearby sales, including 25% premium for acquisition of strata subdivided sites reflecting the difficulty in acquiring all units in a strata development</td>
<td>Site 1: $42,800,000 Site 2: $56,100,000 Site 3: $41,650,000 Site 4: $42,375,000</td>
</tr>
<tr>
<td>Construction contingency</td>
<td>Various sources using industry standards</td>
<td>10% of base construction costs</td>
</tr>
<tr>
<td>Professional fees</td>
<td>Various sources using industry standards</td>
<td>10% of base construction costs and contingency</td>
</tr>
<tr>
<td>Development contributions</td>
<td>Willoughby Local Infrastructure Contributions Plan 2019</td>
<td>1% of construction costs or s7.11 contribution on residential component of development (whichever is less)</td>
</tr>
<tr>
<td>DA Fees</td>
<td>EP&amp;A regulations (marginal fee only – does not account for other fees and charges)</td>
<td>Varies</td>
</tr>
<tr>
<td>Finance costs</td>
<td>Various sources using industry standards</td>
<td>6% of construction costs, land costs and fees &amp; charges</td>
</tr>
<tr>
<td>Developer profit and risk</td>
<td>Various sources using industry standards</td>
<td>20% of all other development costs</td>
</tr>
<tr>
<td>Sales commission, marketing and legal fees</td>
<td>Various sources using industry standards</td>
<td>4% of sales revenues</td>
</tr>
</tbody>
</table>
Residential revenue assumptions
Residential sale prices were calculated from the median of prices achieved by the recent development in the Chatswood CBD bounded by Victoria Avenue, Hercules Street, Albert Avenue and Oscar Street. Following consultation with local real estate agents and profiling of sales, these prices were reduced by 10% to reflect the distance of the feasibility testing sites from Chatswood Station and from shopping centres and other amenities giving the following sale prices:

- One bedroom: $857,250 +gst
- Two bedrooms: $1,396,350 +gst
- Three bedrooms: $2,115,000 +gst

A further 10% reduction was applied to properties on the western side of the railway line which have a frontage to the Pacific Highway, as amenity is reduced by the highway frontage and by this location.

Office and retail revenue assumptions
The average price for retail and office space for the Chatswood CBD was used to estimate likely office and retail development revenue:

- Retail: $8,241/sqm
- Office: $6,754/sqm

Following consultation with real estate agents, the following reductions to the office sales values were applied to reflect the reduced office amenity of some of the sites:

- A 10% reduction was applied for Site 1 given its distance from Chatswood Station
- A 15% reduction was applied for Site 3 given its relative isolation from other commercial premises and distance from Chatswood Station

Following consultation with real estate agents, the following reductions to the retail sales values were applied to reflect the reduced retail amenity of some of the sites and the desire for retailers to be near Victoria Avenue, Chatswood’s main retail artery:

- A 25% reduction for Site 1, Site 2 and Site 4
- A 50% reduction for site 3 given its reduced amenity due to its frontage to the Pacific Highway and its greater isolation from other retail premises

3.2 Feasibility results
RLV ratio results are shown in Table 3 for each development site and development scenario. In all cases the highest RLV ratios are provided by the scenarios in which no commercial development occurs, with lower ratios as the amount of commercial floorspace required increases. This reflects that residential development has the highest returns per square metre (assumed to be between $13,800 and $17,000 per square metre in the Chatswood CBD).

As noted above, an RLV ratio of 1.25 or higher is usually regarded as necessary for development to be feasible, reflecting the need for a premium to be paid to assemble a development site. As a 25% premium is already included in the land acquisition cost for strata units in the calculations underlying Table 3, a ratio of less than 1.25 may reflect a feasible development. An RLV ratio of less than 1 would represent a marginally feasible development if strata apartments could be quickly acquired for their market price.

---

2 Average prices were sourced from [www.commercialpropertyguide.com.au](http://www.commercialpropertyguide.com.au/).
### TABLE 3: FEASIBILITY RESULTS (RLV RATIO)

<table>
<thead>
<tr>
<th>Commercial development amount</th>
<th>Site 1</th>
<th>Site 2</th>
<th>Site 3</th>
<th>Site 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>No commercial development</td>
<td>2.19</td>
<td>1.08</td>
<td>2.02</td>
<td>1.42</td>
</tr>
<tr>
<td>0.5:1 commercial development, exclusively retail</td>
<td>2.09</td>
<td>1.03</td>
<td>2.02</td>
<td>1.38</td>
</tr>
<tr>
<td>1:1 commercial development, mix of retail and office</td>
<td>1.92</td>
<td>0.96</td>
<td>1.87</td>
<td>1.30</td>
</tr>
<tr>
<td>1.5:1 commercial development, mix of retail and office</td>
<td>1.76</td>
<td>0.91</td>
<td>1.74</td>
<td>1.24</td>
</tr>
</tbody>
</table>

Source: SGS 2020

Development of sites 1 and 3 were found to be feasible under every development scenario. Site 4 was found to be feasible under all scenarios except for a 1.5:1 commercial development requirement, which would be marginally feasible. The high RLV ratios reflect the large uplift which a 6:1 FSR would provide. Under the no commercial development scenario, the ratio of new dwellings to existing dwellings would be 15 and 8 on sites 1 and 3 respectively.

Site 2 is likely to be marginally feasible to develop if no commercial development or a minimal amount of commercial development is included. However, requiring commercial components of 1:1 or 1.5:1 would make development unfeasible. This unfeasibility reflects the high acquisition price for Site 2, which contains a large existing apartment building. Even with this high acquisition price, the feasibility ratio for a 1:1 commercial development requirement is only slightly less than 1, meaning that development may become feasible if a developer is willing to accept a smaller profit margin or as market cycles occur in the future, particularly if the value of the apartments on this site decrease as they age.

A sensitivity analysis is presented in Table 4 in which commercial and retail revenues are decreased by 25%. This decreases development feasibility slightly, but does not change the overall feasibility results, indicating that whether development is feasible or not is most strongly influenced by the proportion of residential development and by the residential sale prices rather than by commercial or retail revenues.
TABLE 4: FEASIBILITY RESULTS (RLV RATIO) WITH A 25% REDUCTION IN COMMERCIAL AND RETAIL REVENUES

<table>
<thead>
<tr>
<th>Commercial development amount</th>
<th>Site 1</th>
<th>Site 2</th>
<th>Site 3</th>
<th>Site 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>No commercial development</td>
<td>2.19</td>
<td>1.08</td>
<td>2.02</td>
<td>1.42</td>
</tr>
<tr>
<td>0.5:1 commercial development, exclusively retail</td>
<td>2.05</td>
<td>1.02</td>
<td>1.99</td>
<td>1.35</td>
</tr>
<tr>
<td>1:1 commercial development, mix of retail and office</td>
<td>1.85</td>
<td>0.93</td>
<td>1.80</td>
<td>1.24</td>
</tr>
<tr>
<td>1.5:1 commercial development, mix of retail and office</td>
<td>1.65</td>
<td>0.85</td>
<td>1.63</td>
<td>1.15</td>
</tr>
</tbody>
</table>

Feasible | May be feasible | Unfeasible

Source: SGS 2020
4. CAPACITY AND DEMAND

This section discusses the implications of the proposed amendments to planning controls on Chatswood’s floorspace capacity, and compares this to the floorspace demand indicated by population projections. When considered with potential tenants illustrated by real estate agent consultation and case studies in Chapter 2, this provides an indication of whether there is likely to be enough demand to justify a non-residential floorspace requirement.

4.1 Floorspace demand

Demand modelling method

Floorspace demand was forecast by matching forecast employment growth in the Chatswood CBD with current floorspace data. A floorspace audit was conducted by SGS in 2014 as part of the Willoughby City Council Economic Development Study. The Cordell Connect database was used to add floorspace in developments completed between 2014 and 2016. The resulting floorspace estimates are shown in Table 5. These results are broken down by industry as categorised by the Australian Bureau of Statistics as well as by the broad land use of each building, including the following categories:

- Services, including local health and education facilities and other buildings predominately associated with services for the local population,
- Offices,
- Retail and hospitality, including buildings predominately used as shops or restaurants, and
- Other, predominately large format premises situated along the Hume Highway and automotive retail.

Note that these categories refer to the broad land use of each building, which may differ from the individual businesses operating within it. For example, while most retail premises are contained in retail and hospitality buildings, an office or services building may contain retail premises.

Floorspace projections were created by growing 2016 floorspace amounts for each industry and broad land use category in line with forecast employment by industry growth rates from the TZP v1.51 employment projections produced by Transport for NSW. Projected employment growth rates for the Chatswood CBD are shown in Figure 13.

The highest growth rates are predicted to occur in industries typically regarded as knowledge intensive or associated with health or education, including financial and professional services, rental and real estate services, education and training, health care and social assistance and arts and recreation services. Of these, professional services and health care and social assistance are two of the largest industries of employment in the Chatswood CBD.

Substantial growth is also forecast in population-serving industries like retail trade and accommodation and food services industries, catering to the expanding population. These are also large industries of employment in the Chatswood CBD.
### Table 5: Floorspace by Broad Land Use Category and Industry in the Chatswood CBD 2016 (SQM)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Services</th>
<th>Retail and Hospitality</th>
<th>Other</th>
<th>Office</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>152</td>
<td>490</td>
<td>0</td>
<td>1,998</td>
<td>2,640</td>
</tr>
<tr>
<td>Construction</td>
<td>0</td>
<td>204</td>
<td>0</td>
<td>0</td>
<td>204</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>0</td>
<td>472</td>
<td>413</td>
<td>0</td>
<td>886</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>643</td>
<td>158,290</td>
<td>7,674</td>
<td>2,110</td>
<td>168,716</td>
</tr>
<tr>
<td>Accommodation &amp; Food</td>
<td>37,794</td>
<td>46,142</td>
<td>0</td>
<td>7,138</td>
<td>91,074</td>
</tr>
<tr>
<td>Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport &amp; Warehousing</td>
<td>0</td>
<td>1,543</td>
<td>0</td>
<td>2,482</td>
<td>4,025</td>
</tr>
<tr>
<td>Media &amp; Telecommunications</td>
<td>990</td>
<td>6,687</td>
<td>0</td>
<td>44,268</td>
<td>51,944</td>
</tr>
<tr>
<td>Financial &amp; Insurance</td>
<td>654</td>
<td>4,218</td>
<td>0</td>
<td>26,882</td>
<td>31,754</td>
</tr>
<tr>
<td>Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rental &amp; Real Estate</td>
<td>134</td>
<td>3,399</td>
<td>471</td>
<td>4,214</td>
<td>8,218</td>
</tr>
<tr>
<td>Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Services</td>
<td>991</td>
<td>3,712</td>
<td>0</td>
<td>92,031</td>
<td>96,734</td>
</tr>
<tr>
<td>Admin Services</td>
<td>469</td>
<td>6,152</td>
<td>677</td>
<td>108,553</td>
<td>115,851</td>
</tr>
<tr>
<td>Public Admin &amp; Safety</td>
<td>10,858</td>
<td>987</td>
<td>0</td>
<td>17,335</td>
<td>29,179</td>
</tr>
<tr>
<td>Education &amp; Training</td>
<td>2,192</td>
<td>2,889</td>
<td>0</td>
<td>7,746</td>
<td>12,827</td>
</tr>
<tr>
<td>Health Care &amp; Social</td>
<td>35,956</td>
<td>10,696</td>
<td>169</td>
<td>22,444</td>
<td>69,265</td>
</tr>
<tr>
<td>Assistance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts &amp; Recreation Services</td>
<td>12,533</td>
<td>8,203</td>
<td>0</td>
<td>1,789</td>
<td>22,526</td>
</tr>
<tr>
<td>Other Services</td>
<td>4,518</td>
<td>14,902</td>
<td>469</td>
<td>5,152</td>
<td>25,041</td>
</tr>
<tr>
<td>Total</td>
<td>107,885</td>
<td>268,986</td>
<td>9,872</td>
<td>344,141</td>
<td>730,884</td>
</tr>
</tbody>
</table>

Source: SGS 2020

### Figure 13: Forecast Employment Growth Rates for the Chatswood CBD

Source: SGS 2020, Transport for NSW 2019 TZP v1.51 forecast
Future demand results

The estimated future demand for additional floorspace in the Chatswood CBD is shown in Table 6 broken down by broad land use category and Table 7 broken down by industry. A substantial amount of additional floorspace is estimated to be required between 2016-2036 and 2036-2056.

**TABLE 6: FORECAST ADDITIONAL FLOORSPACE DEMAND BY BROAD LAND USE CATEGORY IN THE CHATSWOOD CBD, 2016-2056**

<table>
<thead>
<tr>
<th>BLC Type</th>
<th>Floorspace demand 2016-2036</th>
<th>Floorspace demand 2036-2056</th>
<th>Total demand 2016-2056</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services</td>
<td>28,683</td>
<td>34,145</td>
<td>62,828</td>
</tr>
<tr>
<td>Retail and hospitality</td>
<td>52,242</td>
<td>68,157</td>
<td>120,398</td>
</tr>
<tr>
<td>Office</td>
<td>84,185</td>
<td>81,409</td>
<td>165,594</td>
</tr>
<tr>
<td>Other</td>
<td>1,614</td>
<td>2,326</td>
<td>3,939</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>166,724</strong></td>
<td><strong>186,037</strong></td>
<td><strong>352,760</strong></td>
</tr>
</tbody>
</table>

Source: SGS 2020

**TABLE 7: FORECAST ADDITIONAL FLOORSPACE DEMAND BY INDUSTRY IN THE CHATSWOOD CBD, 2016-2056**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Floorspace demand 2016-2036</th>
<th>Floorspace demand 2036-2056</th>
<th>Total demand 2016-2056</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>747</td>
<td>1,350</td>
<td>2,098</td>
</tr>
<tr>
<td>Construction</td>
<td>51</td>
<td>59</td>
<td>110</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>36</td>
<td>29</td>
<td>65</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>24,472</td>
<td>39,135</td>
<td>63,607</td>
</tr>
<tr>
<td>Accomm &amp; Food Services</td>
<td>23,637</td>
<td>24,203</td>
<td>47,840</td>
</tr>
<tr>
<td>Transport &amp; Warehousing</td>
<td>110</td>
<td>165</td>
<td>276</td>
</tr>
<tr>
<td>Media &amp; Telecomm</td>
<td>9,871</td>
<td>9,391</td>
<td>19,262</td>
</tr>
<tr>
<td>Financial &amp; Insurance Services</td>
<td>7,895</td>
<td>6,042</td>
<td>13,937</td>
</tr>
<tr>
<td>Rental &amp; Real Estate Services</td>
<td>2,689</td>
<td>2,982</td>
<td>5,671</td>
</tr>
<tr>
<td>Professional Services</td>
<td>26,247</td>
<td>19,298</td>
<td>45,545</td>
</tr>
<tr>
<td>Admin Services</td>
<td>27,988</td>
<td>29,908</td>
<td>57,896</td>
</tr>
<tr>
<td>Public Admin &amp; Safety</td>
<td>5,756</td>
<td>3,929</td>
<td>9,684</td>
</tr>
<tr>
<td>Education &amp; Training</td>
<td>4,553</td>
<td>6,194</td>
<td>10,746</td>
</tr>
<tr>
<td>Health Care &amp; Social Assistance</td>
<td>16,829</td>
<td>26,697</td>
<td>43,525</td>
</tr>
<tr>
<td>Arts &amp; Recreation Services</td>
<td>9,169</td>
<td>10,158</td>
<td>19,327</td>
</tr>
<tr>
<td>Other Services</td>
<td>6,674</td>
<td>6,497</td>
<td>13,171</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>166,724</strong></td>
<td><strong>186,037</strong></td>
<td><strong>352,760</strong></td>
</tr>
</tbody>
</table>

Source: SGS 2020

The greatest demand by land use category is for additional office floorspace, followed by retail and hospitality and then services. The office floorspace demand would be split between A-grade and premium offices with large floorplates and smaller offices suitable for businesses providing local services. A more accurate estimate of future retail floorspace demand would
be given by retail modelling, but the estimates below suffice to provide a high-level estimate of future floorspace demand for the purposes of strategic planning.

There is forecast demand for additional floorspace to accommodate a wide variety of industries, with the highest demand from the retail trade, accommodation and food services, professional services, administrative services and health care and social assistance industries.

The case studies in Section 2.3 show the type of non-residential land uses that would seek to locate in a B4 mixed use zone, and the demand results show that there is anticipated to be increased demand for these uses.

4.2 Development capacity

Capacity method

SGS has assessed the theoretical yield for retail and commercial development in the Chatswood Town Centre under the current planning framework and the proposed changes. This notional floorspace capacity identifies the total floorspace that would be realised if all available sites were developed under various assumptions. This is an analysis undertaken to inform a broad discussion of strategy for the centre and potential opportunities for additional supply under planning controls, and as such a testing of low and high scenarios (and changes in assumptions have been considered.

The following two development scenarios were calculated for development capacity under the proposed changes to planning controls, reflecting the different assumptions which could be made about which sites are likely to redevelop:

- A high scenario showing development capacity if significant redevelopment occurs including on sites with substantial existing commercial development, and
- A low scenario showing a more constrained outcome where existing large commercial buildings are not redeveloped.

Development feasibility analysis in Chapter 3 shows that even larger residential flat buildings may be feasible to redevelop in the future under the proposed changes to planning controls. The proposed mixed use zone does not include large existing commercial development so the capacity calculation in the proposed mixed-use zone has not been varied between the two scenarios.

This analysis took place in the following stages:

1. **Available land** was first determined. Available land represents all land where commercial development is permissible and reasonable likely to occur.

2. The **potential yield** calculation was conducted, in which the yield of all available sites if they were to be developed is calculated. Development assumptions are listed below.

3. The **net yield** calculation was conducted, in which the existing commercial floorspace on each site is subtracted from the potential yield to generate the amount of additional floorspace, known as the ‘net yield’.

Potential development yield has been assessed on a site by site basis using high level assumptions. This analysis is intended to provide a high-level overview of how proposed changes in planning controls impact on development capacity rather than to model on a site-specific basis where development is likely to occur. Site-specific constraints in combination with design standards may mean that the possible yield of some sites is less than the maximum permissible floor space, but in most cases appropriate design responses should ensure that this does not occur. Site amalgamation would be required to allow some properties to be redeveloped.
Exclusions
A series of exclusions are used to determine whether sites are likely to be redeveloped. These exclusions are discussed below.

Public domain
Elements of the public domain are unlikely to be redeveloped and are manually excluded in all scenarios.

Uplift exclusion
Sites on which current floorspace is 40% or more of the allowable gross floor area under current planning controls have been assumed to be unfeasible to redevelop as the available uplift is not considered large enough when compared with current development.

GFA and FSR exclusions – proposed controls low scenario
Sites in the proposed commercial core zone which have a developed notional FSR of 2:1 or greater, or which contain 10,000sqm or more of GFA are already intensively developed and are relatively unlikely to be redeveloped in the future. This is a stricter exclusion than the uplift exclusion on sites where development is likely to be unfeasible or unlikely due to the prohibitive cost of site acquisition. This exclusion has only been applied in the low scenario for the proposed changes to planning controls.

Development yield under current planning controls
Development yields under current planning controls were calculated using the following assumptions:
- Developments will achieve the maximum possible floor space ratio, with total floor area determined by multiplying property size by the floor space ratio.
- In the B4 zone, developments will have a residential component with a notional FSR of 1:1. This is the maximum allowed under clause 4.4A (14) of the Willoughby LEP 2012.
- Where provisions permit increased FSRs in particular areas under clause 4.4A of the Willoughby LEP 2012, all necessary conditions will be met and the maximum FSR allowable under these provisions will be achieved.

Development yield under proposed planning controls
Development yields under the proposed planning controls were calculated using the lesser of the following results:
- The maximum available floor space ratio, including any bonus provisions, multiplied by the property area, and
- The floor area within a building envelope formed by a 50% site coverage and the proposed maximum building heights, with a 4m floor to floor height and 90% building efficiency used to convert building envelope volume to floor area.

In the mixed use zone, developments are assumed to have a notional commercial FSR of 1:1, with the remainder of each development comprised of residential accommodation. In the commercial area, all floorspace is assumed to be commercial.

Capacity results
Capacity results are shown in Table 8 under both current and proposed planning controls. The proposed controls provide a substantial increase on current capacity, which is relatively limited when compared with the estimated current floorspace supply (730,884 sqm).

The Chatswood CBD Planning and Urban Design Strategy estimated that under current planning controls there is capacity for 245,000 sqm of floorspace (180,000 commercial and
65,000 residential) and capacity for 1,345,000sqm of floorspace under the proposed controls (705,000 sqm residential and 640,000 commercial).

TABLE 8: COMMERCIAL DEVELOPMENT CAPACITY (SQM) IN THE CHATSWOOD CBD

<table>
<thead>
<tr>
<th>Zone</th>
<th>Current controls</th>
<th>Proposed controls</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Low scenario</td>
</tr>
<tr>
<td>B3 Commercial Core</td>
<td>175,090 (89%)</td>
<td>360,957 (69%)</td>
</tr>
<tr>
<td>B4 Mixed Use</td>
<td>20,851 (11%)</td>
<td>163,195 (31%)</td>
</tr>
<tr>
<td>Total</td>
<td>195,941</td>
<td>524,152</td>
</tr>
</tbody>
</table>

Source: SGS 2020

Available land for development under current planning controls is shown in Figure 14, while available land under proposed planning controls is shown in Figure 15 for the high development scenario and Figure 16 for the low development scenario.

The implications of these results and their alignment with demand is discussed below in Section 4.3.

FIGURE 14: AVAILABLE LAND UNDER CURRENT PLANNING CONTROLS
FIGURE 15: AVAILABLE LAND UNDER PROPOSED PLANNING CONTROLS (HIGH DEVELOPMENT SCENARIO)

Legend
- Chatswood CBD Boundary
- Current boundary
- Proposed extensions
- Available land
  - proposed changes - high scenario
- Land use
  - Commercial Core
  - Mixed Use

Source: SGS 2020
4.3 Gap analysis

Two things are necessary to ensure that development can respond to increasing floorspace demand and that a healthy development pipeline is possible:

1. Development capacity which is substantially greater than expected demand, to reflect that capacity results show what would happen if all available sites were redeveloped but in reality only a proportion of sites are likely to be redeveloped and some may be developed to less than their maximum capacity. Some of the sites designated as being available may have site-specific constraints preventing redevelopment altogether.

2. A large number of available development sites, as only a small proportion of sites are likely to be within the development pipeline at any one time and development may take some time from inception to completion. Some sites may be difficult to develop, which means that more sites must be available.

A comparison of the floorspace capacity and demand results from the previous sections is shown in Table 9. As noted above, capacity should ideally be much larger than likely demand to ensure that economic growth is not constrained.
### TABLE 9: COMPARISON OF FLOORSPACE CAPACITY AND DEMAND

#### Capacity

<table>
<thead>
<tr>
<th>Zone</th>
<th>Commercial core – B3</th>
<th>Mixed use – B4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current controls</td>
<td>179,738</td>
<td>23,882</td>
<td>203,619</td>
</tr>
<tr>
<td>Proposed controls – low</td>
<td>360,957</td>
<td>163,195</td>
<td>524,152</td>
</tr>
<tr>
<td>Proposed controls - high</td>
<td>1,199,768</td>
<td>163,195</td>
<td>1,362,963</td>
</tr>
</tbody>
</table>

#### Demand

<table>
<thead>
<tr>
<th>Broad land use category</th>
<th>Services</th>
<th>Retail and hospitality</th>
<th>Office</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand 2016-2036</td>
<td>28,683</td>
<td>52,242</td>
<td>84,185</td>
<td>1,614</td>
<td>166,724</td>
</tr>
<tr>
<td>Demand 2036-2056</td>
<td>34,145</td>
<td>68,157</td>
<td>81,409</td>
<td>2,326</td>
<td>186,037</td>
</tr>
<tr>
<td>Total demand 2016-2056</td>
<td>62,828</td>
<td>120,398</td>
<td>165,594</td>
<td>3,939</td>
<td>352,760</td>
</tr>
</tbody>
</table>

Source: SGS 2020

**Current planning controls**

Under current planning controls there are few undeveloped sites where development is likely, as shown by the relatively few sites highlighted in Figure 14. Some of these sites are along Victoria Avenue where significant site amalgamation is required. The small number of currently available sites is likely to constrain development and overcome the risk that future supply will exceed potential demand.

Development capacity under current planning control is slightly larger than likely demand between 2016-2036, and lower than demand between 2016-2056. As some sites may not be redeveloped, this means that capacity is not large enough to accommodate likely demand until 2036 or between 2036-2056. Without changes to planning controls, economic development in Chatswood would be constrained in the medium and long term.

**Proposed controls – low scenario**

There are many more sites estimated to be available for development under the proposed changes to the planning controls (as shown in Figure 15) even if more conservative development assumptions are made (as shown in Figure 16). The increased maximum FSR causes more sites to be included west of the North Shore Line, and on the southern side of Victoria Avenue.

The current intensive development of many of the sites in Chatswood’s commercial core means that under the low development scenario, there are still relatively few sites proposed to be zoned B3 which are likely to be redeveloped and where significant site amalgamation is not required. Commercial floorspace must be provided in the B4 zone to provide a healthy pipeline of developable sites in the short-long term.

Capacity under the low scenario is somewhat higher than modelled floorspace demand between 2016-2056. However, the capacity in the proposed B3 zone is only slightly higher than the total 2016-2056 demand. As this total capacity is unlikely to be realised, the capacity created in the B4 zone is needed to ensure that planning controls provide enough capacity to meet long-term demand.
Proposed controls – high scenario

The high scenario is considered to be a less likely development scenario than the low scenario given that substantial redevelopment of large commercial premises would be required.

Capacity under the high development scenario is much higher than modelled demand. Floorspace capacity exceeding modelled demand does not imply that the future floorspace market will be oversupplied, harming the operation of the centre and causing vacancies. Rather, an excess of development capacity provides more opportunities for developers to respond to increases in floorspace demand, particularly if demand exceeds current projections. The development market would generally seek to deliver a level of commercial floorspace than what would meet demand in the market.

The notional capacity created in the commercial core by itself is enough to meet forecast demand between 2016-2056. However, developments in this area may not be appropriate for all businesses who wish to locate in Chatswood in the future. Future developments in the Commercial Core are likely to have a focus on A-grade office space and offices with large floorplates, particularly west of the North Shore Line. This may not be suitable for smaller office or population-serving businesses. By contrast, commercial development in the B4 zone is more likely to deliver smaller premises, which are suitable for local services and small businesses.

The size of developments, which would be possible in the commercial core, may also require a large number of businesses to pre-commit to leasing floorspace in order for development to occur, which could act to limit the amount of development that does occur. By contrast, additional commercial floorspace is likely to be easier to deliver in the proposed mixed use zone, as the residential portion of developments will increase development feasibility and also mean that less commercial pre-commits are required.
5. DISCUSSION

Chatswood currently has relatively high provision of office floorspace, which benefits from good public transport and road accessibility, high levels of amenity and a central location within the North Shore. These attributes give Chatswood a competitive advantage as a retail and services centre within the North Shore, even if there is intense competition for larger commercial tenants with other office markets like Macquarie Park, St Leonards and North Sydney. NSW Government strategic plans and proposed transport investment will maintain or increase the competitive offer of the Chatswood CBD as a business location.

Willoughby Council’s proposed changes to planning controls would increase allowable floorspace, encouraging development that would potentially improve the amenity of Chatswood, a key part of its competitive advantage. This would increase the likelihood of additional delivered floorspace being occupied.

Development feasibility

Development feasibility modelling shows that feasibility is unlikely to be significantly impacted by the proposed 1:1 minimum commercial development requirement. This is a result of the large uplift being proposed from current floor space ratios, with increased residential yields driving development feasibility.

In general, modelling suggests that a higher commercial FSR requirements than 1:1 may impact on feasibility as the residential development component provides the highest return. There is the potential for large apartment buildings to be redeveloped in the future if the market shifts, although this may not be feasible in the current or near-term development market.

Constraints of mixed use development

Consultation with local real estate agents revealed several challenges to achieving successful mixed use development. These include the need for commercial tenancies to ‘feel’ separate from residential apartments to create a business sense of address and the need to have different strata schemes for residential and commercial uses. There is a need to maintain a strong commercial core in the Chatswood CBD as the primary business location, while encouraging carefully designed mixed use development to provide for businesses which may not be catered for by the B3 zone.

Capacity and demand

Current development capacity is not high enough to meet likely floorspace demand to 2036 or beyond when it is assumed that less than 100% of total available capacity will be realised. The number of available sites would increase dramatically under the proposed amendments. The additional capacity created will be needed to create opportunities for development to meet forecast floorspace demand between 2016-2036 and 2036-2056.

There are few sites in the Chatswood CBD that could be developed under current planning controls, which would act to constrain the growth of the Chatswood CBD. This was the rationale for the development of the Chatswood CBD Strategy, which creates capacity to encourage growth in coming decades.

While the proposed controls provide the scope for redevelopment in Chatswood’s commercial core if the development market is favourable, a conservative capacity scenario highlights that there are still only a limited number of sites likely to redevelop in the B3 zone. Under this scenario, commercial development in both the proposed commercial and mixed
use zone would be needed to provide sufficient opportunities for growth to accommodate future demand.

Potential tenants in the B4 zone
Consultation with the real estate sector and analysis of case studies revealed examples of tenant profiles which could seek to locate in floorspace in the B4 zone. These include small professional services like accountants and real estate agencies and a wide variety of population services. These businesses could be displaced from the B3 zone if further redevelopment occurs but could be accommodated by development in the B4 zone. In combination with the modelled increase in floorspace demand, likely tenant profiles for mixed use developments indicate likely market demand for additional floorspace to be delivered in the proposed B4 zone.

Different businesses are likely to be attracted to each part of the expanded Chatswood CBD. In the parts of the mixed use zone closer the commercial core, a greater proportion of office development would be likely. Further away there is likely to be less demand for office development and so other population services are more likely tenants. Large numbers of retail businesses would be unlikely far away from Victoria Avenue, but some stand-alone clusters (like the Chatswood Place development) may occur. While parts of the proposed southern extension of the Chatswood CBD are relatively distant from other commercial uses and from Chatswood Station and so would not provide high amenity for some commercial and retail businesses, other employment generating uses such as automobile retailers could locate in this area.

Size of the commercial development requirement
The size of the non-residential development requirement in the proposed B4 zone (for example 0.5:1, 1:1 or 1.5:1) can be informed by case study results, potential development design and development feasibility.

Recent and proposed mixed use developments in North Sydney reveal that a 0.5:1 non-residential development requirement may generate some non-retail commercial tenancies off the ground floor. However, there is a risk that predominately ground floor retail floorspace could be delivered to reach 0.5:1, particularly on smaller development sites. This would compromise the ability of provisions to secure consolidated non-retail commercial floorspace.

While most development is likely to be feasible with a commercial floorspace requirement of 1.5:1, feasibility may be compromised for sites which contain a large number of strata apartments.

The analysis in this study suggest that a requirement for a minimum non-residential development component of 1:1 would be most appropriate. It should be noted that 0.5:1 may better reflect the lesser suitability and demand for commercial use on sites in the further part of the southern extension area. However, creating multiple different minimum floorspace ratios for small parts of the B4 zone may overcomplicate the planning controls and is not recommended in this instance.

Conclusion
SGS’s research shows that introduction of a 1:1 commercial development requirement in the proposed B4 mixed use zone in Chatswood:
- Is unlikely to limit development feasibility.
- Would respond to future demand for premises suitable for small scale offices and population services as Chatswood grows (which may not be provided in the B3 zone).
- Is likely to serve a different floorspace market than the commercial core (B3 zone) and so not negatively impact on the operation of the commercial core.
- Does correspond to a tenant profile with a broad range of small and population serving businesses, and so is unlikely to result in a significant increase in vacancies.
- Should deliver floorspace suitable for small businesses and population services tailored to different parts of the Chatswood CBD rather than only shop-top housing.

On this basis, SGS recommends that a 1:1 non-residential development requirement is appropriate in the proposed mixed use zone around the Chatswood CBD.
### APPENDIX A: FULL DEVELOPMENT FEASIBILITY RESULTS

#### TABLE 10: FULL FEASIBILITY RESULTS FOR SITE 1

<table>
<thead>
<tr>
<th></th>
<th>No commercial development</th>
<th>0.5:1 retail development</th>
<th>1:1 retail and office development</th>
<th>1.5:1 retail and office development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential units</td>
<td>243</td>
<td>222</td>
<td>202</td>
<td>182</td>
</tr>
<tr>
<td>Office floorspace (sqm)</td>
<td>0</td>
<td>0</td>
<td>2,136</td>
<td>3,204</td>
</tr>
<tr>
<td>Retail floorspace (sqm)</td>
<td>0</td>
<td>763</td>
<td>915</td>
<td>1,373</td>
</tr>
<tr>
<td>Total development costs</td>
<td>$172,431,474</td>
<td>$162,608,295</td>
<td>$155,609,438</td>
<td>$148,471,833</td>
</tr>
<tr>
<td>Net sales revenue</td>
<td>$272,765,289</td>
<td>$258,196,428</td>
<td>$243,573,162</td>
<td>$228,977,099</td>
</tr>
<tr>
<td>Residual land value (net sales revenue – total development costs)</td>
<td>$100,333,815</td>
<td>$95,588,134</td>
<td>$87,963,725</td>
<td>$80,505,265</td>
</tr>
<tr>
<td>Estimated land cost</td>
<td>$45,736,490</td>
<td>$45,736,490</td>
<td>$45,736,490</td>
<td>$45,736,490</td>
</tr>
<tr>
<td>Feasibility ratio (residual land value / estimated land cost)</td>
<td>2.19</td>
<td>2.09</td>
<td>1.92</td>
<td>1.76</td>
</tr>
</tbody>
</table>

#### TABLE 11: FULL FEASIBILITY RESULTS FOR SITE 2

<table>
<thead>
<tr>
<th></th>
<th>No commercial development</th>
<th>0.5:1 retail development</th>
<th>1:1 retail and office development</th>
<th>1.5:1 retail and office development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential units</td>
<td>155</td>
<td>142</td>
<td>129</td>
<td>116</td>
</tr>
<tr>
<td>Office floorspace (sqm)</td>
<td>0</td>
<td>0</td>
<td>1,364</td>
<td>2,046</td>
</tr>
<tr>
<td>Retail floorspace (sqm)</td>
<td>0</td>
<td>487</td>
<td>585</td>
<td>877</td>
</tr>
<tr>
<td>Total development costs</td>
<td>$109,500,577</td>
<td>$105,355,079</td>
<td>$101,080,317</td>
<td>$96,870,187</td>
</tr>
<tr>
<td>Net sales revenue</td>
<td>$174,204,617</td>
<td>$167,331,007</td>
<td>$158,937,356</td>
<td>$151,303,726</td>
</tr>
<tr>
<td>Residual land value (net sales revenue – total development costs)</td>
<td>$64,704,041</td>
<td>$61,975,928</td>
<td>$57,857,039</td>
<td>$54,433,539</td>
</tr>
<tr>
<td>Estimated land cost</td>
<td>$59,967,490</td>
<td>$59,967,490</td>
<td>$59,967,490</td>
<td>$59,967,490</td>
</tr>
<tr>
<td>Feasibility ratio (residual land value / estimated land cost)</td>
<td>1.08</td>
<td>1.03</td>
<td>0.96</td>
<td>0.91</td>
</tr>
</tbody>
</table>
TABLE 12: FULL FEASIBILITY RESULTS FOR SITE 3

<table>
<thead>
<tr>
<th></th>
<th>No commercial development</th>
<th>0.5:1 retail development</th>
<th>1:1 retail and office development</th>
<th>1.5:1 retail and office development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential units</td>
<td>278</td>
<td>255</td>
<td>232</td>
<td>208</td>
</tr>
<tr>
<td>Office floorspace (sqm)</td>
<td>0</td>
<td>0</td>
<td>2,446</td>
<td>3,670</td>
</tr>
<tr>
<td>Retail floorspace (sqm)</td>
<td>0</td>
<td>874</td>
<td>1,048</td>
<td>1,573</td>
</tr>
<tr>
<td>Total development costs</td>
<td>$187,728,868</td>
<td>$175,928,724</td>
<td>$168,926,295</td>
<td>$161,973,871</td>
</tr>
<tr>
<td>Net sales revenue</td>
<td>$277,707,127</td>
<td>$265,929,176</td>
<td>$252,063,956</td>
<td>$239,242,370</td>
</tr>
<tr>
<td>Residual land value</td>
<td>$89,978,259</td>
<td>$90,000,452</td>
<td>$83,137,661</td>
<td>$77,268,499</td>
</tr>
<tr>
<td>Estimated land cost</td>
<td>$44,505,990</td>
<td>$44,505,990</td>
<td>$44,505,990</td>
<td>$44,505,990</td>
</tr>
<tr>
<td>Feasibility ratio</td>
<td>2.02</td>
<td>2.02</td>
<td>1.87</td>
<td>1.74</td>
</tr>
</tbody>
</table>

TABLE 13: FULL FEASIBILITY RESULTS FOR SITE 4

<table>
<thead>
<tr>
<th></th>
<th>No commercial development</th>
<th>0.5:1 retail development</th>
<th>1:1 retail and office development</th>
<th>1.5:1 retail and office development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential units</td>
<td>162</td>
<td>148</td>
<td>135</td>
<td>121</td>
</tr>
<tr>
<td>Office floorspace (sqm)</td>
<td>0</td>
<td>0</td>
<td>1,425</td>
<td>2,137</td>
</tr>
<tr>
<td>Retail floorspace (sqm)</td>
<td>0</td>
<td>509</td>
<td>611</td>
<td>916</td>
</tr>
<tr>
<td>Total development costs</td>
<td>$109,435,144</td>
<td>$105,452,608</td>
<td>$101,335,048</td>
<td>$97,285,000</td>
</tr>
<tr>
<td>Net sales revenue</td>
<td>$161,748,149</td>
<td>$156,253,147</td>
<td>$149,170,376</td>
<td>$142,881,490</td>
</tr>
<tr>
<td>Residual land value</td>
<td>$52,313,005</td>
<td>$50,800,539</td>
<td>$47,835,328</td>
<td>$45,596,490</td>
</tr>
<tr>
<td>Feasibility ratio</td>
<td>1.42</td>
<td>1.38</td>
<td>1.30</td>
<td>1.24</td>
</tr>
</tbody>
</table>
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