# 3. RESIDENT TRADE AREA: CURRENT AND FUTURE

#### **Trade Area Definition**

The current trade area for Bankstown Central has been updated to reflect a broader 'potential' market that could be served by the centre, assuming an expanded and significantly improved offering. These extended markets are indicated in Map 3.1. and take into account the following points:

- A primary core sector is defined to reflect the more immediate or walkable resident market around Bankstown Central, which is expected to grow considerably over the next two decades. The centre has an opportunity to capture high market shares (food and non-food) from this area.
- Major transport projects, including the Metro City & Southwest project, are expected to enhance access to Bankstown Central and its penetration of broader markets, especially those to the east of the centre. These effects are accounted for in a new secondary east sector (previously tertiary east) and expanded tertiary south east sector. The scope for the trade area to extend further east than defined is considered to be limited by Bankstown's outbound positioning to these inner markets and their proximity to other regional centre competitors (e.g. Burwood, Bondi Junction, Miranda).
- Larger regional centres such as Parramatta and Miranda will continue to compete strongly and restrict the trade area to the north and south respectively. However with future expansion Bankstown Central will benefit from a larger scale of offering relative to other competing centres (e.g. Hurstville, Burwood), which also supports the extended trade area boundaries in these directions.
- There will continue to be a large degree of overlap in the markets served by Bankstown Central and Roselands, however, the potential trade area assumes that future strategies for each asset will ultimately support the elevation of Bankstown Central to the clear leading regional centre in this market.

Map 3.2 overleaf illustrates the potential <u>main</u> trade area in the context of the main trade areas expected to be served by competing regional centres. The map shows that although Bankstown Central will continue to share much of its market with Roselands and, to a lesser degree, Hurstville and Burwood, the centre has the potential to be supported more by markets to the north and west which are less competitive and where higher market shares can be achieved.





Bankstown Potential Main Trade Area vs. Competing Regional Centre Main Trade Areas Map 3.2

#### **Population Forecast**

The current resident population of the potential trade area is estimated at around 658,000 people, including 368,000 people in the main trade area. These population levels rank amongst the highest for regional centres in the country based on current benchmarks *[refer Table 3.1].* 

With a larger easterly catchment in the 'potential' trade area, it is noted that the substantial resident market is shared with other regional centres in this direction. For example, the proportion of main trade area residents that are also situated in the main trade area for Roselands could still be in the order of 30% going forward. Nevertheless it is clear that future retail potential of Bankstown Central will be underpinned by access to a significant resident market by regional centre standards.

Recent and forecast population growth are outlined in Table 3.2 overleaf. In the last five years growth in the total trade area has been reasonably strong at 1.6% p.a., with the primary west, secondary north, tertiary north and tertiary south west sectors all achieving growth of well over 2% p.a.

The forecast growth over the next two decades takes into account a range of information sources, including

- NSW government population projections for LGAs within the trade area.
- Small Area Forecast information (SAFI) projections prepared by .id Consulting.
- Future new dwelling targets for the Canterbury Bankstown LGA (refer Section 2) which accounts for a large part of the main trade area. A significant share of this new housing is expected to be delivered in the Bankstown City Centre (6,000 dwellings), consistent with the objectives of the Sydenham-Bankstown Urban Renewal Corridor strategy.

In line with the above, the primary core sector is expected to accommodate a significant increase in population over the next 20 years, from around 11,500 people currently to around 23,400 by 2037 (i.e. average growth of 3.6% p.a.).

In the next 10 years, the population of the <u>main trade area</u> is forecast to increase by around +65,000 people to,433,000 people by 2027, reflecting a total increase of around 18%. Over the next two decades, the population is forecast to increase by an additional +140,000 people (+38%) from the current population, reaching over 508,000 people by 2037.

In relation to the total trade area, the population is forecast to grow by approximately +241,000 people over the next two decades (+37%), reaching almost 900,000 people

by 2037. This reflects average growth of around 1.6% p.a. over the next 20 years which is in line with the growth projected for Sydney over the same period (based on NSW Government medium series projections).

The growing resident trade area reflects a significant opportunity for Bankstown Central to maximise its capture of the expanding resident market, including new residents within Bankstown on the doorstep of the shopping centre, which is large compared with regional centre benchmarks.

#### **Population Benchmarking**

Bankstown Central	Table 3.1				
		Bankstow	n Central		
	Population (2017)	Var'n from Regional Average	Population (2037)	Var'n from Regional Average	Regional Centre Average
Total Primary	107,390	+34%	162,190	+102%	80,100
Total Secondary	260,630	+70%	346,310	+126%	153,500
Main Trade Area	368,020	+58%	508,500	+11 <mark>8%</mark>	233,600
Total Tertiary	290,130	+40%	390,300	+88%	207,300
Total Trade Area	658,150	+54%	898,800	+110%	427,600

#### Ranking : Bankstown Central vs Regional Centres (current benchmarks)



#### **Forecast Resident Population**

Bankstown Central Trade Area

Population **Total Change** Annual Population Growth (%) 2012 2017 2022 2027 2032 2037 2017-2037 12-17 17-22 22-27 27-32 32-37 17-37 Primary: 11,940 Core 10,750 11,450 13,120 15,900 19,570 23,390 1.3% 2.8% 3.9% 4.2% 3.6% 3.6% 49,240 51,980 73,210 21,230 East 55,700 60,990 66,950 1.1% 1.4% 1.8% 1.9% 1.8% 1.7% West 38,980 43,960 49,960 55,160 60,260 65,590 21,630 2.4% 2.6% 2.0% 1.8% 1.7% 2.0% **Total Primary** 98,970 107,390 118,780 132,050 146,780 162,190 54,800 1.6% 2.0% 2.1% 2.1% 2.0% 2.1% Secondary: 33,010 35,920 40,110 42,250 9,240 2.3% 1.7% 1.0% 1.2% North 29,470 38,000 1.1% 1.1% 39.740 41,730 44,330 52.380 56,880 15.150 1.0% 1.2% 1.7% 1.6% East 48.070 1.6% 1.7% South East 76,070 81,810 88,240 95,690 104,020 112,690 30,880 1.5% 1.5% 1.6% 1.7% 1.6% 1.6% 57.530 60.940 64,930 69.270 73.840 78,510 17.570 1.2% 1.3% 1.3% 1.3% 1.2% South 1.3% 46,740 12,840 West 39,610 43,140 49,860 52,890 55,980 1.7% 1.6% 1.3% 1.2% 1.1% 1.3% **Total Secondary** 242,420 260,630 280,160 300,890 323,240 346,310 85,680 1.5% 1.5% 1.4% 1.4% 1.4% 1.4% 398,940 Main Trade Area 341,390 368,020 432,940 470,020 508,500 140,480 1.5% 1.6% 1.6% 1.7% 1.6% 1.6% Tertiary: North 67,970 78,460 88,670 96,940 105,370 114,160 35,700 2.9% 2.5% 1.8% 1.7% 1.6% 1.9% South East 78,760 85,410 91,600 98,840 106,920 115,300 29,890 1.6% 1.4% 1.5% 1.6% 1.5% 1.5% 0.2% 0.3% 0.3% 0.3% South 48,940 49,400 50,120 50.890 51.650 52,390 2.990 0.3% 0.3% South West 35,850 44,010 46,630 48,990 51,360 11,370 2.2% 1.9% 1.2% 0.9% 1.3% 39,990 1.0% North West 34,410 36,870 39,640 44,430 50,490 57,090 20,220 1.4% <u>1.5%</u> 2.3% 2.6% <u>2.5%</u> <u>2.2%</u> **Total Tertiary** 265,930 363,420 100,170 290,130 314,040 337,730 390,300 1.8% 1.6% 1.5% 1.5% 1.4% 1.5% **Total Trade Area** 607,320 658,150 712,980 770,670 833,440 898,800 240,650 1.6% 1.6% 1.6% 1.6% 1.5% 1.6% Sydney 1.8% 1.7% 1.6% 1.5% 1.5% 1.6%

1. As at June 30.

Source: ABS; NSW Government; SAFi; Urbis

Table 3.2

#### **Socio-Economic Profile**

The key attributes of the main trade area population relative to the Sydney averages is shown in Chart 3.2, while detailed demographic information for each trade area sector is included in Appendix A. The level of retail demand in the trade area is influenced by relatively low incomes, although income levels are likely to be understated to some degree by an element of a 'cash economy'. Other features of the main trade area include:

- a high proportion of families with children (56% vs. 48% for Sydney);
- a more blue collar workforce (35% vs. 25%);
- a slightly higher proportion of renters (38% vs. 35%), and;
- one of the most ethnically diverse markets in Australia with 48% of residents born overseas (vs. 38% for Sydney), including from Lebanon (6.2% vs. 1.2%); Vietnam (6.2% vs. 1.8%) and China (6.3% vs. 4.9%).

In addition there is an above average representation of second and third generation residents from migrant families, with 16% having Lebanese ancestry, 14% Chinese and 8% Vietnamese. This suggests, in broad terms, that a reasonable portion of trade area retail expenditure is likely to be directed to retailers catering specifically to ethnic markets.

#### Key Demographics, 2016



Source: ABS; Urbis

Table 3.3 outlines the demographic changes observed in the trade area between the 2006 and 2016 Census and compares this to the changes occurring across Sydney as a whole. The demographic shifts are not reflective of any noticeable improvement in incomes or wealth levels, however with good rates of population growth forecast and the planning strategies supporting progressive growth in white collar employment within and around Bankstown City Centre, we would expect progressive improvement in the spending capacity of trade area residents over the longer term.

#### Demographic Change, 2006-2016

		Change 2	2006-2016		Change Var'n from Sydney (% point)			
	Total Primary	Main Trade Area	Total Trade Area	Sydney	Total Primary	Main Trade Area	Total Trade Area	
Household Income								
Average Household Income	+44%	+45%	+45%	+54%	-10%	-9%	-10%	
Avreage Household Size	+7%	+8%	+7%	+4%	+2%	+3%	+3%	
Per Capita Income								
Per Capita Income	+72%	+73%	+74%	+72%	-0%	+1%	+1%	
Age Distribution								
Average Age	-1%	-1%	-0%	+1%	-1%	-2%	-1%	
Dependancy Ratio	-1.1% pts	-1.1% pts	-1.0% pts	+0.7% pts	-2%	-2%	-2%	
House Tenure								
Owner	-3.0% pts	-3.7% pts	-3.3% pts	-3.0% pts	-0%	-1%	-0%	
Purchaser	+2.0% pts	+2.3% pts	+2.0% pts	+0.1% pts	+2%	+2%	+2%	
Renter	+5.2% pts	+5.1% pts	+4.8% pts	+2.7% pts	+2%	+2%	+2%	
Labour Force								
Labour Force Participation	+0.6% pts	+0.7% pts	+0.4% pts	+0.0% pts	+1%	+1%	+0%	
% Managers / Professionals	+2.7% pts	+3.0% pts	+2.6% pts	+3.1% pts	-0%	-0%	-0%	
% Other White Collar	+0.9% pts	+0.2% pts	-0.3% pts	-1.2% pts	+2%	+1%	+1%	
% Blue Collar	-3.6% pts	-3.2% pts	-2.3% pts	-1.9% pts	-2%	-1%	-0%	
Birthplace								
Australian Born	-1.8% pts	-4.0% pts	-4.4% pts	-4.7% pts	+3%	+1%	+0%	
Overseas Born	+1.8% pts	+4.0% pts	+4.4% pts	+4.7% pts	-3%	-1%	-0%	
Asia	+2.0% pts	+3.4% pts	+3.8% pts	+4.6% pts	-3%	-1%	-1%	
Europe	-4.6% pts	-3.7% pts	-3.6% pts	-6.6% pts	+2%	+3%	+3%	
Other	+4.4% pts	+4.3% pts	+4.2% pts	+6.7% pts	-2%	-2%	-2%	

## 4. NON-RESIDENT MARKETS

In addition to trade area residents, retailing in the Bankstown centre benefits from access to a mix of workers, students and other visitors. The train station and bus interchange also generate a significant transient market close to the Bankstown Central property.

These additional markets would, to some degree, overlap with the defined resident trade area market, which has been taken into account in assessing the future potential of the Bankstown Central property.

#### Workers

There are an estimated 10,000 workers in the Bankstown City Centre currently (i.e. the defined primary core sector), with white collar workers (with a weighting to clerical/services occupations) accounting for around 7,000 (70%). It is notable that around half (51%) of the local worker base resides outside the trade area (60%), reflecting the high order role of Bankstown in metropolitan Sydney.

Table 4.1 compares the size of the Bankstown worker market with other Sydney regional centres surrounded by a notable workforce.

#### Local Workforce

Bankstown Central vs. Comparable Re	egional Centre Locations	Table 4.1
Location	Est. workforce	
Parramatta	38,200	
Macquarie	28,600	
Chatswood	20,900	
Liverpool	16,500	
Penrith	12,600	
Bondi Junction	11,400	
Burwood	10,400	
Bankstown	10,000	
Blacktown	7,500	
Brookvale (Warringah)	7,300	
Hurstville	7,100	
Miranda	6,400	
Source: ABS Census 2016; Urbis		

With significant future infrastructure investment and planning support, the future Bankstown workforce rank higher support a significantly larger workforce going forward.

#### **Students**

The current student population in Bankstown is centred in the TAFE NSW campus, which supports an estimated 8,000 annual enrolments. Other smaller schools contribute to some additional student activity in the City Centre but have not been accounted for specifically in the retail demand analysis (e.g. Bankstown Public School, Bankstown Girls High School).

The new Western Sydney University campus will be developed on a site around 100 metres northwest of Bankstown Central, and could accommodate 7,000 students on completion in 2021. A greater concentration of education facilities would be expected longer term.

The potential to increase student patronage at Bankstown Central is supported by the close proximity of the future WSU campus, as well as the train station and bus interchange which many TAFE students would use frequently.

#### **Total Non-Resident Segments**

A summary of the forecast population in the primary core sector, including the key worker and student segments, is shown in Table 4.3. As Bankstown continues to grow and evolve in line with its prescribed planning role, these populations are also forecast to increase considerably.

Over the next 20 years, the Bankstown centre population is forecast to increase by around 12,000 people, including 6,100 workers, 2,400 students and 7,000 residents. This will see the total non-resident population increase from around 42,000 in 2017 to over 57,000 by 2032. In addition, the average daily population of other visitors is also expected to reach around 3,000 by 2032 [refer Table 2.12].

#### Forecast Population (incl. Non-Resident)

Bankstown Primar	Bankstown Primary Core Sector, 2017-2037									
	2017	2022	2027	2032	2037	2017-2037				
Residents	11,450	13,120	15,900	19,570	23,390	+11,940				
Workers	10,100	12,100	14,400	18,100	22,700	+12,600				
Student Enrolments	8,100	10,400	13,800	14,200	14,400	+6,300				

Source: Urbis

## 5. RETAIL SPENDING FORECASTS

A summary of current and forecast retail expenditure in the trade area is provided in Table 5.1. All expenditure figures are expressed in constant \$2017 including GST, and the key points to note are as follows:

#### **Trade Area Residents**

- Broadly consistent with the level of incomes, retail spend per capita by trade area residents is 17% below the Sydney average [refer Appendix Chart A.1]. Lower spend levels are evident in the primary core (-29%) and total primary (-26%) although these rates are expected to improve progressively relative to the Sydney average in the future. We note there is an expected element of a cash economy in Bankstown which results in an understatement of incomes and spending capacity. This has been taken into account in the market demand and floorspace potential assessment.
- Total retail expenditure currently amounts to just over \$8 billion, including \$4.3 billion by main trade residents and \$1.18 billion by primary trade area residents.
- The forecast growth in retail expenditure by trade area residents incorporates the following growth factors between 2017-20237:
  - Forecast population growth as outlined in Section 2 of this report, i.e. 1.6% p.a. on average.
  - Real retail spend per capita growth averaging 1.0% p.a., with varying growth rates across product groups.
- Over the next two decades, annual retail expenditure generated by trade area residents is forecast to increase by an average of 2.6% p.a. On this basis, annual retail expenditure would increase by \$5.4 billion to \$13.4 billion by 2037 [refer Table 5.2 and Appendix Table A.4].

#### Bankstown City Centre / Primary Core

• The expanding local resident base in the primary core sector is forecast to generate total retail expenditure of \$120 million currently. Over the next two decades, the market is forecast to increase to over \$300 million, reflecting average growth of 4.7% p.a. Bankstown Central has an opportunity to capture a very solid share of this captive market (i.e. 28%-30%).

- Retail expenditure by other key non-resident segments is forecast as follows:
  - The spending generated by workers in the Bankstown City Centre is forecast to grow from a current volume of \$60 million to approximately \$178 million by 2037 (5.6% p.a.).
  - Student retail spending, which only accounts for a minor share of total expenditure in the City Centre, is forecast to increase from \$5 million to \$12 million over the 20-year period (5.0% p.a.).

As noted earlier, a portion of expenditure by workers and students would overlap with the trade area resident market and this crossover has been taken into account in the retail potential analysis for Bankstown Central.

#### Forecast Retail Expenditure Summary

Bankstown Cer	Bankstown Central Trade Area, 2017-2037 (\$2017, incl. GST)							
	2017	2022	2027	2032	2037	2017-2037		
	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	Total Change	Avg. Growth p.a.	
Total Primary	1,178	1,373	1,607	1,879	2,185	+1,007	3.1%	
Total Secondary	3,169	3,586	4,057	4,592	5,182	+2,013	2.5%	
Main Trade Area	4,347	4,958	5,664	6,471	7,367	+3,020	2.7%	
Total Tertiary	3,683	4,185	4,726	5,337	6,016	+2,333	2.5%	
Total Trade Area	8,030	9,143	10,390	11,808	13,383	+5,353	2.6%	
Primary Core								
- Residents*	120	145	185	240	303	+182	4.7%	
- Workers	60	76	98	132	178	+119	5.6%	
- Students	5	7	10	11	12	+8	5.0%	

\* Included in Total Primary

Source: Urbis

### 6. COMPETITION

Bankstown Central trades within a relatively competitive market, particularly in terms of non-food shopping. Roselands, together with several other regional centres (e.g. Burwood, Liverpool and Parramatta) and sub-regional centres (e.g. Chullora Marketplace and Bass Hill Plaza) all compete for the trade area market of Bankstown.

There is also a significant range of independent retailers within shopping strips and the Bankstown town centre catering to the needs and preferences of the local ethnic communities which is particularly the case for grocery shopping and dining/take-away food but also relevant in terms of non-food shopping (e.g. fashion serving residents with middle-eastern backgrounds).

Incorporating an extended range of shops that cater to the tastes and preferences of the various ethnic communities is a key opportunity for the Bankstown Central and will help to enhance their emotional connection with the centre and drive greater visitation for a broader range of their shopping requirements.

#### **Competitive Intensity**

Table 6.1 details the <u>average</u> amount of competing retail GLA accessible to Bankstown Central trade area residents (within 5 km and 10 km), in terms of both regional centre GLA and total centres catering to discretionary shopping needs generally (i.e. regional, sub-regional and outlet centres). Comparisons are made to the average competition faced by regional centres in Sydney.

#### Competitive Intensity – Average Accessible Retail GLA

Bankstown Ce	Bankstown Central vs. Sydney Regional Centre Average, 2017 Table									
	Competin	ig Regional Ce	entre GLA		Competing Regional / Sub Outlet Centre GL					
	Bankstown Central	Sydney Regional Centre Avg.	Bankstown Central Variation	Bankstown Central	Sydney Regional Centre Avg.	Bankstown Central Variation				
	(sq.m)	(sq.m)	(%)	(sq.m)	(sq.m)	(%)				
Main Trade Area										
- Within 5 km	44,000	24,000	+83%	77,900	55,200	+41%				
- Within 10 km	208,900	147,000	+42%	392,000	275,600	+42%				
Total Trade Area										
- Within 5 km	57,500	35,000	+64%	95,600	67,600	+41%				
- Within 10 km	208,000	156,900	+33%	388,400	284,700	+36%				
Source: Urbis										

The analysis shows that Bankstown Central faces an above average level of competition in both its main and total catchments. This is influenced by Roselands which is accessible to many trade area residents, as well as the ring of competing regional and other discretionary centres (including DFO Homebush) around the total trade area.

Whilst competition is above average in an absolute sense, it is relevant to also consider the level of competition on a <u>per capita</u> basis. This takes into account the relatively dense nature of Bankstown's resident market, and shows that the effective level of competition is closer to averages *[refer Table 6.2]*. The per capita analysis shows a level of competitive supply more in line with benchmarks.

#### Competitive Intensity – Average Accessible Retail GLA Per Capita

Bankstown Cer	ntral vs. Syd	ney Region	al Centre A	verage, 2017		Table 6.2
	Bankstown Central	Sydney Regional Centre Avg.	Bankstown Central Variation	Bankstown Central	Sydney Regional Centre Avg.	Bankstown Central Variation
	(sq.m)	(sq.m)	(%)	(sq.m)	(sq.m)	(%)
Main Trade Area						
- Within 5 km	119,600	92,700	+29%	211,500	217,200	-3%
- Within 10 km	567,700	578,600	-2%	1,065,300	1,086,000	<mark>-2</mark> %
Total Trade Area						
- Within 5 km	87,400	74,300	+18%	145,200	144,600	+0 <mark>%</mark>
- Within 10 km	316,100	339,200	- <mark>7</mark> %	590,200	616,000	-4%

Source: Urbis

#### **Proposed Developments**

In assessing the long term development potential of Bankstown Central, the following future developments are assumed:

- A major expansion of **Westfield Parramatta** (i.e. 25,000-30,000 sq.m), including new international retailers.
- Expansion and upgrades to **Roselands Shopping Centre**, consistent with the changes currently being considered by Vicinity Centres (e.g. new supermarkets, F&B upgrades, tenant remixing initiatives.
- Ongoing improvements to other key competing regional centres, including **Westfield Hurstville**, **Westfield Liverpool**, **Westfield Burwood** and **Stockland Merrylands**.

#### **Competitive Centres**

Bankstown Central				Table 6.3
	Trade Area Sector	Retail Floorspace (sq.m)	Distance from Bankstown (km)*	Major Tenants
Primary Trade Area				
Chullora Marketplace	PE	19,300	4.0	Big W (7,900), Woolworths (4,200), ALDI (1,500)
Coles Greenacre	PE	4,900	2.0	Coles (4,300)
South Terrace Plaza	PE	3,000	0.5	Nino's Fruit Barn (2,200)
Secondary Trade Area				
Roselands	SSE	54,200	4.5	Myer (24,100), Coles (4,600), Food For Less (2,000), Kmart (8,100)
Riverwood Plaza	SSE	7,800	5.5	Woolworths (3,000), Coles (2,300)
Broadway Plaza	SSE	8,500	2.5	Woolworths (4,100)
ALDI Lakemba	SSE	1,700	4.5	ALDI (1,700)
Revesby Village Centre	SS	4,000	6.0	Coles (3,500)
Woolworths Revesby	SS	4,000	6.5	Woolworths (4,000)
Woolworths Padstow	SS	1,200	5.0	Woolworths (1,200)
Bass Hill Plaza	SW	16,000	5.0	Kmart (8,200), Woolworths (4,100)
Chester Square	SW	8,400	6.5	Woolworths (3,500)
Woolworths Berala	SN	3,700	6.5	Woolworths (3,700)
ALDI Bankstown Airport	SW	1,300	7.0	ALDI (1,300)
Campsie Centre	SE	13,700	7.0	Big W (7,700)
Woolworths Campsie	TE	3,100	7.0	Woolworths (3,100)
Tertiary Trade Area				
Menai Marketplace	TS	14,500	13.0	Big W (6,500), Woolworths (4,500)
Fairfield Forum	TNW	17,700	11.4	Coles (3,100), Aldi (1,300), Kmart (4,900)
Neeta City	TNW	19,000	11.1	Big W (6,600), Woolworths (3,840)

Lidcombe Shopping Centre TN 27,700 9.0

ΤN

16,100

8.4

Big W (7,200), Woolworths (3,700)

Kmart (6,400), Aldi (1,400), Woolworths (4,100)

\* Distance based on shortest route by road.

Source: PCA Shopping Centres Online; Urbis



Map 6.1



.

Auburn Central

## 7. CURRENT CENTRE

#### Composition

The composition of <u>retail</u> floorspace in the Bankstown City Centre is outlined in Table 7.1.

The Bankstown Central centre currently provides 73,300 sq.m of retail gross leasable area (GLA) and accounts for almost three quarters (74%) of floorspace in the City Centre. The composition features an above average provision of DDS (+40%) and mini major (+35%) floorspace. However, a lower provision of department store space (-44%), resulting in total retail GLA being broadly in line with the regional centre average.

The balance of the Bankstown City Centre includes a further 25,200 sq.m of retail GLA and features an Aldi supermarket and a sizeable amount of food retail / fresh food serving local ethnic communities. There is also a significant amount of F&B outlets (~5,700 sq.m) supported by local resident and non-resident (e.g. worker) markets.

Total retail GLA in the City Centre amounts to over 98,000 sq.m.

#### Floorspace and Composition

Bankstown City Cent	re				Table 7.1
	Ba	ankstown Centi	ral	Bankstown	Bankstown
	GLA	Regional Average	Variation	Balance GLA	City Centre GLA
	(sq.m)	(sq.m)	(%)	(sq.m)	(sq.m)
Majors					
Department Store	10,167	18,034	-44%		10,167
DDS	22,715	16,206	+40%		22,715
Supermarket	6,185	7,788	-21%	1,300	7,485
Other Majors		962	-100%		
Total Majors	39,067	42,990	-9%	1,300	40,367
Total Mini-Majors	11,281	8,362	+35%	4,330	15,611
Specialty Shops					
Food Retail	1,306	1,079	+21%	4,520	5,826
Food Catering	2,533	3,071	-18%	5,690	8,223
Apparel	11,951	10,709	+12%	1,900	13,851
Other Non-Food	7,193	7,685	-6%	7,420	14,613
Total Retail Specialties	22,983	22,543	+2%	19,530	42,513
Total Retail	73,331	73,895	-1%	25,160	98,491

Source: Vicinity Centres; Urbis

In addition to retail uses, Bankstown Central includes a reasonable range of non-retail drivers of visitation, including a gym and an array of medical services and financial services (refer Table 7.2 overleaf). These uses enhance the centre's role within the town centre. Whilst there are no cinemas in the centre, the 8 screen Hoyts complex is located on a freestanding site at the north-western corner of the centre's site.

#### **Turnover Performance**

The current performance of the centre is summarised in Table 7.2 overleaf.

The current Myer department store anchor is continuing to trade well below benchmarks by regional centre standards. However, the store has managed to achieve good sales growth in recent years, with turnover increasing from \$21.8 million in 2012 to \$25.5 million currently (~3% p.a.).

Kmart has assumed a strong trading position in the centre, now achieving turnover in excess of \$32 million compared with just \$21 million in 2010 (+33%). Consistent with market trends, Big W continues to decline with sales now sitting at \$21.6 million.

Woolworths provides strong anchor support to the fresh food offering in the centre (\$67.6 million), whilst Supa IGA is significantly weaker (\$11 million). Coles remains a notable omission in the centre (and Bankstown generally).

The centre currently has a good complement of mini majors with key brands including JB Hi-Fi, Rebel, Priceline, Dan Murphys and Fields of Fruit (F&V) all performing well. Total turnover for mini majors is around 13% above average, from floorspace 35% above average.

Retail specialties trade at an average of just over \$8,000 per sq.m which is 25% below the benchmark rate for regional centres. In addition, specialty shops account for 42.3% of total retail turnover, compared with 46.1% for the average.

The current performance of the centre, and retail specialties in particular, suggests that future strategies for Bankstown Central will look to enhance / optimise performance of existing centre space in the short term. Future expansion would be considered thereafter underpinned by the solid growth forecast for the Bankstown City Centre and the broader resident trade area served by the centre.

	Bankstown Central			Regional Shopping Centres			Bankstown Central variation		
	GLA (sq.m)	Turnover (\$M)	Turnover (\$psm)	GLA (sq.m)	Turnover (\$M)	Turnover (\$psm)	GLA (sq.m)	Turnover (\$M)	Turnover (\$psm)
Department Stores	10,167	25.5	2,507	18,034	54.9	3,043	-44%	-54%	-18%
DDSs	22,715	66.3	2,920	16,206	57.8	3,565	+40%	+15%	-18%
Supermarkets	6,185	79.2	12,797	7,788	91.8	11,793	-21%	-14%	+9%
Other Majors	0	0.0	0	962	4.7	4,880	-100%	-100%	-100%
Total Majors	39,067	171.0	4,376	42,990	209.2	4,866	-9%	-18%	-10%
Total Mini Majors	11,281	80.4	7,131	8,362	71.4	8,542	+35%	+13%	-17%
Specialty Shops:									
Food Retail	1,306	15.1	11,563	1,079	15.0	13,889	+21%	+1%	-17%
Food Catering	2,533	31.1	12,292	3,071	38.5	12,549	-18%	-19%	-2%
Total Food Specialties	3,840	46.2	12,044	4,150	53.5	12,897	-7%	-14%	-7%
Apparel	11,951	88.2	7,380	10,709	100.5	9,383	+12%	-12%	-21%
Homewares	3,637	19.1	5,257	2,545	30.1	11,816	+43%	-36%	-56%
Leisure/General	938	11.0	11,702	2,603	31.5	12,088	-64%	-65%	-3%
Retail Services	2,618	20.1	7,684	2,513	24.4	9,701	+4%	-17%	-21%
Total Non-Food Specialties	19,144	138.4	7,230	18,394	186.5	10,139	+4%	-26%	-29%
Total Retail Specialties	22,983	184.6	8,034	22,543	240.0	10,647	+2%	-23%	-25%
Total Retail	73,331	436.1	5,947	73,895	520.6	7,045	-1%	-16%	-16%
Retail Specialties / Total Retail	31.3%	42.3%	1.35	30.5%	46.1%	1.51			
Non-Retail Specialties (Reporting)	178	14.2	79,480	406	24.7	60,813	-56%	-43%	+31%
Non-Reporting Specialties / Prof. Services & Suites (Shopfront)	5,486			2,695			+104%		
Vacant Specialties	1,282			1,127			+14%		
Total Specialties	29,929			26,770			+12%		
Cinemas	0	0.0	0	4,370	9.9	2,266	-100%	-100%	-100%
Other Tenants	9,210	1.4		6,228	13.5		+48%	-89%	
Total Property	89,487	451.7		88,720	568.7		+1%	-21%	
Total Centre (Reporting)	73,509	450.2	6,125	74,301	545.3	7,339	-1%	-17%	-17%

**Composition and Performance** 

Source: Urbis Shopping Centre Benchmarks 2017; Urbis

#### **Market Shares**

In assessing the development potential of Bankstown Central, it is relevant to consider achievable market shares for both Bankstown Central and the broader retail offering in the City Centre.

Table 7.3 outlines the estimated current market shares being achieved. Across the total trade area, Bankstown Central captures an estimated 4.6% market share, including 8.1% in the main trade area and 17.6% in the primary trade area. Including the balance of the City Centre, total market shares increase to 6.6%, including 11.7% in the main trade area and 26.9% in the primary trade area.

In line with the broader 'potential' trade area defined, Bankstown Central is estimated to attract a relatively low amount of turnover from outside the trade area (i.e. 10%-11%). The beyond percentage is lower again for the balance of the City Centre (~8%) which supports a number of retail outlets catering to more local residents (e.g. food retail, F&B), particularly to the south of the train line. However the beyond business is supported to some degree by local workers, of which around half reside outside the trade area.

Chart 7.1 (overleaf) further illustrates the market shares achieved by Bankstown Central and the Bankstown City Centre and compares this to the range of shares achieved by regional centres. It is noted that this benchmarking does not account for any additional shares captured by retailing outside other regional centres. Nevertheless, the benchmarking highlights that, outside the primary trade area, Bankstown Central / City Centre is capturing a relatively low share of its available market. This indicates good underlying capacity to increase floorspace and turnover over time.

#### **Current Market Share**

Bankstown City Centre, 2017	,				Table 7.3
	Food Retail	Food Catering	Apparel	Other Non-Food	Total Retail
Bankstown Central					
Total Primary	13.2%	7.6%	50.3%	18.5%	17.6%
Total Secondary	2.7%	2.3%	15.0%	5.1%	4.6%
Main Trade Area	5.6%	3.7%	24.3%	8.7%	8.1%
Total Tertiary	0.3%	0.3%	1.9%	0.6%	0.6%
Total Trade Area	3.2%	2.1%	13.8%	4.9%	4.6%
Beyond	7.4%	9.6%	12.7%	11.3%	10.6%
Bankstown Balance					
Total Primary	7.8%	16.8%	4.8%	9.5%	9.4%
Total Secondary	1.0%	3.2%	0.9%	1.5%	1.5%
Main Trade Area	2.9%	6.8%	1.9%	3.6%	3.6%
Total Tertiary	0.0%	0.2%	0.0%	0.1%	0.1%
Total Trade Area	1.6%	3.7%	1.0%	2.0%	2.0%
Beyond	6.6%	5.1%	15.1%	10.2%	7.8%
Fotal Bankstown City Centre					
Total Primary	21.0%	24.4%	55.0%	28.0%	26.9%
Total Secondary	3.6%	5.5%	15.9%	6.7%	6.1%
Main Trade Area	8.5%	10.5%	26.3%	12.3%	11.7%
Total Tertiary	0.3%	0.5%	2.0%	0.7%	0.6%
Total Trade Area	4.8%	5.8%	14.8%	6.9%	6.6%
Beyond	7.2%	6.7%	12.9%	11.0%	9.7%
Turnover (\$M)					
Bankstown Central	121.8	32.2	135.8	146.2	436.1
Bankstown Balance	59.6	59.8	10.7	60.1	190.3
Total Bankstown City Centre	<u>181.4</u>	<u>92.1</u>	146.5	206.4	626.3
Source: Urbis					



#### **Current Market Shares**

Note: F=Food, NF=Non-Food, AP=Apparel

Source: Urbis

# 8. DEVELOPMENT POTENTIAL

In line with the market opportunities identified, the indicative supportable scale and retail mix of Bankstown Central is now outlined.

#### Supportable Floorspace and Composition

The recommended scale and retail mix for Bankstown Central is detailed in Table 8.1 and the key points to note are as follows:

- The supportable future composition for Bankstown Central reflects an opportunity for the centre to establish a clear leading position within its trade area. Reflective of this strategy we believe the centre should retain a department store anchor in future master planning (~11,000 sq.m), with provisions for small increases over time (+3,000-4,000 sq.m). If this floorspace is not utilised by a department store it could be considered for mini-majors and/or specialty shop retailing.
- Some downsizing of the current DDS offer would be appropriate given the struggling Target store and the challenges associated with sustaining three DDSs in one centre (particularly with a view to longer term). However, master planning may still allow for additions to DDS or associated floorspace to account for potential new brands in the Australian market.
- With the growing resident base around the centre there will be market support for additional supermarket floorspace over time, including potential new brands (e.g. Kaufland). Vicinity Centres needs to be proactive in securing any new supermarkets and ensuring they do not open elsewhere in the City Centre.
- There is an opportunity for a significant increase in mini major floorspace to support the elevation of the centre's role for fashion and other discretionary shopping needs. Total supportable floorspace is assessed at approximately 21,000 sq.m within the next 10 years (+9,000-10,000 sq.m), and 33,000 sq.m longer term. This includes allowance for a significant increase in the range of mini major fashion brands which could account for almost half (48%) of future mini major space, versus 18% currently.
- The assessed supportable specialty shop GLA within the next 10 years is almost 40,000 sq.m, compared with 30,000 sq.m currently. The specialty floorspace includes around 34,000 sq.m of retail uses, reflecting 38% of total retail floorspace which is above the regional centre average (30.5%) and influenced by the assumed removal of Target, as well as a significant increase in F&B floorspace (+4,000 sq.m)

to 6,500 sq.m). In the long term, total specialty shop GLA could be in the order of 50,000-60,000 sq.m, including 45,000-52,000 sq.m of retail uses.

- The opportunity to consolidate Bankstown Central's role for food and dining could see total F&B floorspace (mini major and specialty) increasing to 7,300 sq.m within the next 10 years. This F&B provision would reflect 8.2% of total retail space, compared with just 3.5% currently. Beyond this total F&B space could increase to over 13,000 sq.m (over 10% of retail), supported by the centre's access to workers, students and visitors/public transport patrons in the City Centre. There is potential upside to these floorspace estimates, depending on the quality and range of offer provided elsewhere in the Bankstown town centre.
- A new cinema complex within the Bankstown Central property would require the relocation of the existing Hoyts venue. If this occurs a tenancy in the order of 5,000 sq.m would be appropriate for the purposes of future master planning.
- The opportunity to support a broader range of entertainment and other leisure-based uses could account for up to 8,500 sq.m in the developed centre, including 2,000 sq.m for a gym. Skyzone / Holey Moley and other youth attractions and concepts (e.g. laser tag, gaming, bowling etc.) are potential tenants which would enhance the appeal of the centre to younger customer segments present in the market, including students.
- A range of other non-shop front uses would be well suited to the City Centre location of Bankstown Central and could include medical services (2,000 sq.m or more) and childcare (1,500 sq.m) servicing the strong local resident and worker markets around the centre.

Overall the analysis suggests that a future redevelopment/expansion within the can be supported within the next 10 years. This expansion would comprise an increase in total property GLA of around **26,000 sq.m** to **115,000 sq.m**, including in the order of **88,000 sq.m** of retail defined uses.

Longer term the analysis suggests there will be opportunity for further expansion of the shopping centre and mixed use development, which should be accommodated in the overall master plan. An ultimate total GLA in the order of **161,000 sq.m** should be targeted (+72,000 sq.m on current), including **130,000 sq.m** of retail GLA (+57,000 sq.m on current).

Bankstown Central, 20										Table 8
	<b>2017</b> (sq.m)	Change (sq.m)	<b>2022</b> (sq.m)	Change (sq.m)	<b>2027</b> (sq.m)	Change (sq.m)	<b>2037</b> (sq.m)	Change (sq.m)	<b>2047</b> (sq.m)	Total Change (sq.m)
Majors	(39.11)	(39.11)	(39.11)	(34.11)	(39.11)	(39.111)	(39.11)	(34.111)	(39.11)	(34.11)
Department Store	10,167		11,000		11,000		14,000		15,000	4,833
DDS	22,715	-9,715	13,000	+0	13,000	+3,000	16,000	+1,000	17,000	-5,715
Supermarket	6,185	+3,815	10,000	+0	10,000	+2,500	12,500	+1,250	13,750	+7,565
Total Majors	39,067	-5,067	34,000	+0	34,000	+8,500	42,500	+3,250	45,750	+6,683
Mini-Majors										
Food Retail	1,814	+186	2,000	+0	2,000	+700	2,700	+800	3,500	+1,686
Food Catering		+800	800	+0	800	+400	1,200	+300	1,500	+1,500
Apparel	2,022	+5,378	7,400	+2,000	9,400	+3,100	12,500	+3,000	15,500	+13,478
Other Non-Food	7,445	+55	7,500	+900	8,400	+2,700	11,100	+900	12,000	+4,555
Total Mini-Majors	11,281	+6,419	17,700	+2,900	20,600	+6,900	27,500	+5,000	32,500	+21,219
Specialty Shops										
Food Retail	1,306	+294	1,600	+300	1,900	+500	2,400	+350	2,750	+1,444
Food Catering	2,533	+3,467	6,000	+500	6,500	+2,900	9,400	+2,600	12,000	+9,467
Apparel	11,951	+2,349	14,300	+1,500	15,800	+5,300	21,100	+2,900	24,000	+12,049
Other Non-Food	7,193	+1,207	8,400	+1,300	9,700	+2,500	12,200	+800	13,000	+5,807
Total Retail Specialties	22,983	+7,317	30,300	+3,600	33,900	+11,200	45,100	+6,650	51,750	+28,767
- % total retail	31.3%		37.0%		38.3%		39.2%		39.8%	
Total Retail	73,331	+8,669	82,000	+6,500	88,500	+26,600	115,100	+14,900	130,000	+56,669
Non-Retail Specialties	5,664	+336	6,000	+0	6,000	+500	6,500	+500	7,000	+1,336
Vacancy	1,282	-1,282	0	+0	0	+0	0	+0	0	-1,282
Total Specialty Shops	29,929	+6,371	36,300	+3,600	39,900	+11,700	51,600	+7,150	58,750	+28,821
Other Uses	9,210	+8,290	17,500	+3,500	21,000	+3,000	24,000	+0	24,000	+14,790
- Gym	1,995	+5	2,000	+0	2,000	+0	2,000	+0	2,000	+5
- Cinemas		+5,000	5,000	+0	5,000	+0	5,000	+0	5,000	+5,000
- Skyzone / Holey Moley		+0	0	+3,000	3,000	+3,000	6,000	+0	6,000	+6,000
- Other Entertainment		+0	0	+500	500	+0	500	+0	500	+500
- Medical		+2,000	2,000	+0	2,000	+0	2,000	+0	2,000	+2,000
- Childcare		+1,500	1,500	+0	1,500	+0	1,500	+0	1,500	+1,500
- Other	7,215	-215	7,000	+0	7,000	+0	7,000	+0	7,000	-215
Total Centre	89,487	+16,013	105,500	+10,000	115,500	+30,100	145,600	+15,400	161,000	+71,513

**Development Potential** 

Source: Vicinity Centres; Urbis

The recommended future retail GLA is assessed further in Charts 8.1 and 8.2 which compare Bankstown Central against other regional centres in Australia in terms of retail scale and catchment population. It is evident that Bankstown Central is expected to serve main trade area and total trade area populations which are well above the majority of regional centres currently. Given this the level of supportable retail floorspace also sits outside the current typical range, although the range is also likely to increase progressively over time. As the centre expands its reliance on the competitive main trade area would reduce and enhance Bankstown Central's capacity to capitalise on tertiary markets and the large visitor market in the town centre.

#### **Retail Floorspace Benchmarking**

Bankstown Central : Total Retail GLA and <u>Main</u> Trade Area Population Chart 8.1 vs. Regional Centres



Source: Urbis Shopping Centre Benchmarks 2017

#### **Retail Floorspace Benchmarking**

Bankstown Central: Total Retail GLA and Total Trade Area PopulationChart 8.2vs. Regional CentresChart 8.2



Source: Urbis Shopping Centre Benchmarks 2017

#### **Market Share Potential**

The analysis has broadly considered the market shares that would be needed to support the recommended future expansions to the retail offering.

As noted earlier, Bankstown Central currently achieves reasonable market shares in its primary trade area *[refer Chart 8.3]*, and when other retailing in the City Centre is taken into account, current market shares are higher again. However there is still considered to be scope for Bankstown Central to elevate its share of primary spending from current levels, supported by future population growth within the Bankstown City Centre which will significantly increase the size of the market immediately around the Bankstown Central.

In the secondary trade area (and tertiary and beyond markets), the potential to increase market shares from current levels will be influenced by competing developments (e.g. Roselands, Westfield Parramatta, refer Section 6), which will result in some initial decrease in market share. However, Bankstown Central is expected to recapture its share of spending with its own future developments and improvements. On balance, the assessed supportable secondary trade area shares are above current levels.

The tertiary and beyond markets (which form the Beyond MTA market) are considered to be more significant opportunities for Bankstown Central going forward. Chart 8.3 illustrates the increase that could be achieved in Beyond MTA turnover, taking into account the expected elevation of the role and profile of the Bankstown City Centre over time which will attract more workers and visitors from across a broad region.

Also of note, the current "Beyond MTA" share of turnover is influenced by the 'potential' trade area definition used in this report. This trade area includes tertiary markets for the future centre that would not form part of the current trade area, thereby skewing the increase shown which influences the current "Beyond MTA" metrics.



#### Market Share Potential

Note: F=Food, NF=Non-Food, AP=Apparel

Source: Urbis

### DISCLAIMER

This report is dated 4 April 2018 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd's (**Urbis**) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of Vicinity Centres (**Instructing Party**) for the purpose of Development Potential Assessment (**Purpose**) and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

In preparing this report, Urbis was required to make judgements which may be affected by unforeseen future events, the likelihood and effects of which are not capable of precise assessment.

All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

In preparing this report, Urbis may rely on or refer to documents in a language other than English, which Urbis may arrange to be translated. Urbis is not responsible for the accuracy or completeness of such translations and disclaims any liability for any statement or opinion made in this report being inaccurate or incomplete arising from such translations.

Whilst Urbis has made all reasonable inquiries it believes necessary in preparing this report, it is not responsible for determining the completeness or accuracy of information provided to it. Urbis (including its officers and personnel) is not liable for any errors or omissions, including in information provided by the Instructing Party or another person or upon which Urbis relies, provided that such errors or omissions are not made by Urbis recklessly or in bad faith.

This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

### APPENDIX A ADDITIONAL INFORMATION

#### **Detailed Demographics (1)**

Bankstown Central Trade Area, 2016 Census

Second. Main Tertiary Tertiary Tertiary Total Second. Tertiary Primary Primary Primary Total Second. Second. Second. Total Tertiary Total Total South Trade South South North Trade Sydney West East South Australia Core East Primary North South West Second. North Tertiary East East West West Area Area Household Income: 4% 2% 2% 2% 3% 3% 3% 1% 2% 2% 2% 3% 2% 1% 1% 3% 2% 2% 2% 2% \$1-\$20,800 8% 9% 7% 8% 6% 7% 9% 6% 10% 8% 8% 7% 6% 3% 2% 10% 6% 7% 5% 6% \$20,800-\$52,000 33% 29% 27% 35% 31% 27% 26% 33% 25% 32% 29% 30% 28% 26% 18% 17% 37% 25% 28% 21% \$52.000-\$78.000 23% 19% 18% 19% 18% 17% 19% 14% 17% 17% 17% 18% 17% 14% 15% 18% 16% 17% 15% 17% \$78,000 - \$130,000 22% 22% 24% 22% 23% 22% 25% 29% 24% 21% 23% 23% 25% 25% 24% 20% 25% 24% 25% 25% \$130,000-\$208,000 7% 14% 15% 12% 20% 14% 24% 25% 10% 16% 11% 12% 16% 13% 15% 14% 17% 18% 16% 20% 5% 6% 9% 3% \$208,000 plus 1% 5% 6% 9% 5% 6% 6% 5% 7% 16% 10% 3% 8% 7% 12% 8% Average Household Income \$63,171 \$76,754 \$83,600 \$74,487 \$99,029 \$83,410 \$83,695 \$91,908 ######## ####### \$67,666 \$95,457 \$88,295 ######## \$95,162 \$78,136 \$86,766 \$91,268 \$77,864 \$85,363 Var'n from Sydney Avg. -44% -32% -25% -30% -23% -19% -34% -12% -31% -24% -26% -25% -18% +7% -0% -40% -15% 0% -15% -21% Average Household Size 2.9 3.3 3.3 3.3 3.4 2.9 3.0 2.9 3.2 3.0 3.1 3.3 2.9 2.9 3.1 3.2 3.1 3.1 2.8 2.6 Per Capita Income (all persons): Per Capita Income \$23.529 \$23.920 \$26.568 \$24.971 \$27.073 \$32.836 \$26.092 \$35,755 \$26.246 \$29,646 \$28,300 \$26,445 \$33.167 \$43.101 \$37.057 \$22.581 \$32.272 \$29.911 \$40.323 \$37,309 -38% -33% -35% -35% -26% -30% -34% -8% -20% -26% 0% -7% Var'n from Sydney Avg. -42% -41% -34% -19% -11% -18% +7% -44% Age: Aged 0-14 23% 23% 22% 23% 19% 18% 21% 19% 22% 20% 21% 19% 17% 18% 23% 20% 19% 20% 19% 19% 7% Aged 15-19 4% 7% 7% 7% 6% 6% 6% 6% 7% 6% 6% 6% 6% 7% 7% 6% 6% 6% 6% Aged 20-34 31% 22% 22% 23% 23% 25% 19% 23% 23% 33% 23% 18% 20% 22% 25% 24% 23% 21% 27% 20% Aged 35-49 19% 19% 19% 20% 20% 19% 23% 20% 20% 19% 19% 21% 19% 20% 19% 20% 20% 20% 20% 21% Aged 50-64 14% 16% 17% 16% 17% 18% 16% 19% 17% 17% 17% 14% 18% 21% 16% 18% 17% 17% 17% 18% Aged 65-79 6% 9% 9% 9% 8% 10% 9% 11% 10% 10% 6% 11% 12% 9% 9% 9% 9% 10% 12% 10% Aaed 80+ 3% 3% 4% 4% 3% 4% 4% 5% 5% 4% 4% 2% 5% 4% 3% 4% 3% 4% 4% 4%

32% Dependency Ratio<sup>1</sup> 1. Dependency ratio refers to the proportion of the population between 0-14 and over 65 years

34.3

35%

35.5

35%

34.6

35%

34.6

30%

37.5

32%

35.3

34%

38.3

35%

36.4

37%

36.5

34%

35.9

34%

32.8

28%

38.0

33%

38.9

34%

34.2

34%

36.6

34%

35.8

32%

35.8

33%

36.8

33%

37.8

34%

31.8

Source: ABS; Urbis

Average Age

\$Nil

Table A.1

#### **Detailed Demographics (2)**

Bankstown Central Trade Area, 2016 Census

Table A.2 Second. Main Tertiary Tertiary Tertiary Total Primary Primary Primary Total Second. Second. Second. Second. Total Tertiary Tertiary Total Total South South North Trade South Trade Sydney Tertiary Australia Core East West Primary North East South West Second. North South East East West West Area Area Household Composition (%): Total Family (with children) 52% 62% 61% 60% 57% 53% 53% 54% <u>58%</u> 55% <u>56%</u> 53% 52% 55% 62% 57% 55% <u>56%</u> 48% 43% - Family with children <15 years 38% 36% 35% 36% 33% 29% 33% 30% 33% 32% 33% 33% 28% 29% 39% 32% 32% 33% 29% 28% - Family with children 15+ years 15% 25% 26% 24% 24% 24% 20% 24% 24% 23% 23% 20% 23% 26% 23% 25% 23% 23% 19% 16% Couples with no children 26% 27% 21% 17% 19% 18% 20% 22% 20% 23% 18% 21% 20% 22% 23% 23% 17% 23% 21% 25% Group Household 4% 1.8% 1.4% 2% 5% 4% 4% 2% 2% 7% 3% 1% 1% 3% 4% 4% 3% 3% 3% 3% 25% Lone Person 22% 18% 17% 18% 16% 19% 21% 20% 21% 20% 20% 17% 21% 17% 13% 21% 18% 19% 22% Other 2% 2% 2% 2% 2% 2% 2% 1% 1% 2% 2% 2% 2% 1% 1% 3% 2% 2% 1% 1% Housing Tenure (%)<sup>1</sup>: Owner 15% 31% 35% 31% 29% 31% 26% 37% 33% 31% 31% 23% 34% 42% 30% 25% 31% 31% 30% 32% 23% 34% 32% 32% 29% 27% 37% 32% 28% 40% 47% 25% 34% 32% 34% 36% Purchaser 32% 31% 31% 31% Renter 62% 37% 31% 37% 39% 40% 47% 26% 36% 38% 38% 49% 35% 18% 23% 50% 35% 37% 35% 32% Birthplace (%): Australian Born 34% 51% 54% 51% 41% 45% 45% 69% 57% 52% 52% 37% 50% 74% 67% 38% 52% 52% 61% 72% **Overseas Born** 66% 49% 46% 49% 59% 55% 55% 31% 43% 48% 48% 63% 50% 26% 33% 62% 48% 48% 39% 28% Asia 29% 15% 20% 18% 33% 30% 21% 14% 16% 21% 20% 29% 24% 8% 12% 26% 21% 21% 16% 9% Europe 3% 3% 4% 4% 5% 3% 3% 2% 6% 4% 4% 4% 4% 2% 7% 5% 3% 4% 4% 3% Other 35% 31% 23% 28% 24% 18% 31% 14% 23% 22% 24% 32% 18% 12% 16% 33% 23% 24% 20% 16% Tertiary Education (%)<sup>2</sup>: Bachelor Degree or Higher 26% 16% 16% 17% 21% 26% 22% 20% 13% 21% 19% 23% 24% 26% 22% 11% 22% 21% 28% 22% 9% 8% 8% 8% 8% 9% 8% 9% 8% 9% 8% 8% 9% 11% 10% 7% 9% 9% 9% 9% Advanced Diploma or Associate Degree Undertaking Tertiary Education 8% 7% 9% 6% 7% 7% 8% 6% 8% 7% 6% 7% 7% 8% 8% 6% 10% 7% 6% 7%

1. 'Other' Tenure Types have not been included.

2. As a percentage of the total population aged over 18 years. Not all qualification and education options have been stated, therefore the percentages are of a range much larger than shown and won't add to 100%

Source: ABS: Urbis

#### **Detailed Demographics (3)**

Bankstown Central Trade Area, 2016 Census

Second. Main Tertiary Tertiary Tertiary Total Primary Primary Primary Total Second. Second. Second. Second. Total Tertiary Tertiary Total Total South South North Trade South Trade Sydney North Tertiary Australia Core East West Primary North East South West Second. South East East West West Area Area Labour Force (%): Labour Force Participation 58% 53% 56% 55% 58% 62% 57% 63% 52% 59% 58% 59% 62% 68% 69% 47% 61% 59% 66% 65% % Unemployed 12% 10% 9% 10% 10% 7% 10% 6% 9% 8% 9% 11% 7% 4% 5% 13% 8% 8% 6% 7% 34% % Managers and Professionals 27% 26% 27% 27% 28% 27% 33% 26% 30% 29% 27% 33% 41% 34% 21% 32% 30% 41% 36% % Other White Collar 36% 36% 33% 36% 37% 34% 34% 36% 36% 36% 38% 36% 36% 33% 37% 37% 38% 33% 36% 36% % Blue Collar Occupations 36% 37% 36% 37% 39% 30% 37% 29% 37% 34% 35% 40% 30% 22% 28% 46% 32% 34% 25% 30% Occupation (%): 8% 9% 9% 9% 12% 10% 15% 12% 7% 11% 14% 13% Managers 10% 9% 11% 10% 10% 8% 11% 10% Professionals 19% 17% 18% 18% 19% 23% 18% 21% 17% 20% 19% 19% 22% 26% 22% 14% 21% 20% 27% 23% 14% Technicians & trades workers 13% 15% 15% 15% 17% 13% 14% 14% 15% 14% 14% 17% 13% 12% 14% 15% 14% 14% 12% Community & Personal Service Workers 13% 12% 10% 11% 10% 10% 12% 10% 11% 11% 11% 10% 10% 9% 10% 12% 10% 10% 10% 11% **Clerical & Administrative Workers** 12% 14% 16% 15% 14% 15% 14% 19% 16% 16% 15% 12% 17% 18% 19% 13% 16% 16% 15% 14% Sales Workers 11% 11% 10% 9% 10% 10% 11% 9% 10% 11% 9% 10% 10% 10% 10% 10% 9% 10% 10% 9% Machinery operators & Drivers 11% 10% 9% 10% 9% 7% 11% 7% 10% 9% 9% 8% 7% 4% 7% 13% 7% 8% 6% 6% Labourers 12% 12% 12% 12% 14% 11% 13% 7% 11% 11% 11% 15% 10% 6% 7% 17% 10% 11% 8% 10% Car Ownership (%): % 0 Cars 8% 19% 11% 9% 11% 11% 13% 14% 8% 11% 12% 11% 15% 12% 5% 3% 17% 11% 11% 11% % 1 Car 52% 37% 33% 37% 38% 40% 44% 34% 34% 38% 38% 42% 41% 29% 27% 40% 36% 37% 38% 36% % 2 Cars + 30% 53% 58% 53% 51% 46% 42% 58% 55% 50% 51% 43% 47% 66% 69% 43% 53% 52% 50% 56% Source: ABS: Urbis

Table A.3

#### **Retail Spend Per Capita by Product Group**

Bankstown Central Trade Area vs. Sydney Average, 2017



Source: ABS; MarketInfo; Urbis

Chart A.1

Bankstown Ce	ntral Trade Area, 2017-2	2037 (\$20	17, incl. GS	Г)					Table A.
		Food Retail	Food Catering	Apparel	H'wares	Bulky Goods	Leisure/ General	Retail Services	Total Retail
Primary Core	2017	54	21	12	8	10	12	3	120
	2022	64	26	14	10	12	15	4	145
	2027	80	34	19	14	15	19	5	185
	2032	101	45	24	18	20	25	7	240
	2037	124	58	31	24	25	32	9	303
	Avg. Ann. Growth (%)	4.3%	5.2%	4.9%	5.5%	4.7%	5.2%	4.9%	4.7%
Primary Trade Area	2017	529	181	115	83	115	118	36	1,178
	2022	603	216	135	101	134	141	42	1,373
	2027	691	259	159	122	156	169	50	1,607
	2032	790	311	188	148	182	202	58	1,879
	2037	899	370	220	179	210	240	68	2,185
	Avg. Ann. Growth (%)	2.7%	3.6%	3.3%	3.9%	3.1%	3.6%	3.3%	3.1%
	2017	1,903	679	433	312	427	452	140	4,347
	2022	2,125	792	498	369	486	528	160	4,958
Main Trade	2027	2,374	926	573	438	553	616	184	5,664
Area	2032	2,652	1,082	659	519	629	719	212	6,471
	2037	2,951	1,258	755	612	713	835	243	7,367
	Avg. Ann. Growth (%)	2.2%	3.1%	2.8%	3.4%	2.6%	3.1%	2.8%	2.7%
Total Trade Area	2017	3,448	1,273	818	583	801	844	263	8,030
	2022	3,843	1,482	938	689	909	982	301	9,143
	2027	4,273	1,722	1,072	812	1,028	1,139	344	10,390
	2032	4,751	1,999	1,226	956	1,162	1,321	393	11,808
	2037	5,266	2,314	1,397	1,122	1,310	1,527	447	13,383
	Avg. Ann. Growth (%)	2.1%	3.0%	2.7%	3.3%	2.5%	3.0%	2.7%	2.6%

Forecast Retail Spend

Source : ABS; MarketInfo; Urbis



#### BRISBANE

Level 7, 123 Albert Street Brisbane QLD 4000 Australia T +61 7 3007 3800

#### **GOLD COAST**

45 Nerang Street, Southport QLD 4215 Australia T +61 7 5600 4900

#### MELBOURNE

Level 12, 120 Collins Street Melbourne VIC 3000 Australia T +61 3 8663 4888

#### PERTH

Level 14, The Quadrant 1 William Street Perth WA 6000 Australia T+61 8 9346 0500

#### SYDNEY

Tower 2, Level 23, Darling Park 201 Sussex Street Sydney NSW 2000 Australia T +61 2 8233 9900

#### **CISTRI - SINGAPORE**

An Urbis Australia company #12 Marina View 21 Asia Square, Tower 2 Singapore 018961 T +65 6653 3424 W cistri.com



# BANKSTOWN CENTRAL SHOPPING CENTRE SITE SPECIFIC DEVELOPMENT CONTROL PLAN



DRAFT PREPARED FOR VICINITY CENTRES

# **BANKSTOWN CENTRAL SHOPPING CENTRE**

### 1) APPLIES TO LAND

This Plan applies to Bankstown Central Shopping Centre (Bankstown Central) 1 North Terrace, Bankstown, NSW 2200 as illustrated in Figure 1.

Figure 1 – Bankstown Central Shopping Centre



Source: Urbis

### 2) OBJECTIVES

The objective of this Part of the DCP is to guide future development within Bankstown Central, including:

- To deliver the growth and evolution of Bankstown as a Strategic Centre as identified *The Greater Sydney Region Plan A Metropolis of Three Cities* (March 2018) and *The South District Plan* (March 2018).
- To expand the role of Bankstown Central into a truly mixed-use centre, supporting employment growth as well as a greater diversity of uses, including residential accommodation, student housing, hotel and child-care, whilst continuing its function as a regional shopping centre.
- To ensure that future development responds to the characteristics of the site and surroundings, to facilitate high quality urban design and achieve the desired future character of the area.
- To build on the proximity of existing and future public transport access at the site, as well as the emerging health and education uses being developed in the proximity of the site.
- To provide new open spaces and green boulevards for the current and future resident, worker and visitor community, along with enhanced integration with the future public domain of Bankstown CBD.

### **3) CHARACTER STATEMENT**

The desired future character of Bankstown Central is as follows:

Bankstown Central will be a modern mixed-use centre with enhanced retail provision and will facilitate both employment growth and new residential accommodation within the centre, along with other uses. It will be readily accessible by public transport with convenient connections to the railway station. The public domain will be activated and be a major contributor to the streetscape and urban form of the future Bankstown CBD. The environment will be pleasantly landscaped and will include a new city park and a garden boulevard. The centre will appropriately cater for a growing local community, as well office workers and visitors to the centre, by providing a liveable and quality urban environment.

### 4) CONTROLS FOR THE SITE

#### Setbacks and Street Wall

The setbacks and street wall controls are set out in the Table 1 and Figures 2 & 3 below.

Table 1 –	Setback a	nd Street Wall	Controls

Street	Primary Setback	Secondary Setback	Street Wall Height
The Appian Way	Nil	Min 6m	2-4 storeys
Rickard Road	Min 3m	Min 4m	2-8 storeys
North Terrace	Nil	Min 6m	1-6 storeys
Garden Boulevarde	Nil	Min 6m	2-4 storeys North
			1-2 storeys South
Jacobs Street North	Nil	Min 4m	1-8 storeys
The Mall	Nil	Min 6m	1-6 storeys
Jacobs Street South	Nil	Min 6m	1-8 storeys

#### **Building Separation**

The proposed building separations across the site will be as set out in Table 2 and Figure 2 below

Table 2 – Proposed Building Separation Distances

Building Types	Separation Distances
Commercial to Commercial	6 metres
Commercial to Hotel	9 metres
Commercial to Residential	12 metres or as otherwise provided by the Apartment Design Guide
Hotel to Hotel	12 metres
Residential to Residential (Inc. Student Housing)	Up to a maximum of 24 metres, as provided by the Apartment Design Guide

#### Figure 2 – Proposed Building Separations



Source: FJMT

#### **Building Height Controls**

Figure 3 – Height Sections

Based on investigations into the adjacent new development and the desired future character of the Bankstown CBD, the maximum building height across the Bankstown Central site is RL108.1 within the Town Centre Precinct and the 'marker' corners of the Stacey Street Precinct, which reflects the PANS-OPS controls in place for aircraft circulation on approach to Bankstown Airport. The North Terrace Precinct and Rickard Road South Precinct is proposed to have a height of RL96m, whilst the Rickard Road Precinct and remainder of the Stacey Street Precinct will have a 35m Maximum as per current controls, as illustrated in **Error! Reference source not found.** below.



Picture 1 – Town Centre / North Terrace / Stacey Street Precincts

Source: FJMT



Picture 2 – Rickard Road / North Terrace Precinct Source: FJMT

#### **Street Frontages**

Street frontages will be designed to ensure that new development makes a positive contribution to the streetscape and public domain. Streets will achieve high quality urban design, emphasise key nodes and entry points and provide high levels of pedestrian comfort. The typical street sections proposed are illustrated in the various Figures below

#### Figure 4 – The Appian Way













Source: FJMT

#### Figure 7 – Jacobs Street North





#### Figure 8 – Jacobs Street South Extension





#### Figure 10 - Rickard Road



Source: FJMT

### **5) ENVIRONMENTAL CONSIDERATIONS**

The proposed development shall:

- (a) Encourage building design (namely the built form and layout) of large-scale commercial development and mixed-use development in Zone B4 Mixed Use that minimises the consumption of energy and water.
- (b) The design of new development shall minimise the overshadowing impact on adjoining development.
- (c) The shape, location and height of buildings should be designed to satisfy wind criteria for public safety and comfort at ground level.

# Precinct, Height & FSR Maps




# GFA & FSR by Precinct (existing)



0000

# GFA & FSR by Precinct (proposed)



000

# GFA & FSR Whole Site (proposed)



Com

# Height Precincts by Precinct (proposed)



## Height Control Sections Town Centre/ North Terrace/ Stacey Street Precincts





## Height Control Sections Town Centre/ North Terrace/ Rickard Road Precincts



Town Centre Precinct





# **Indicative Planning Metrics**

		Area / Quantity
Site Area Overall GFA (including new GFA & Retained Shopping Centre GFA)		114,073 sqm
		447,523 sqm
Overall FSR		3.923 : 1
	Commercial Office	119,117 sqm
Employment	Hotel	439 (+ 89 Serviced Apartments)
Employment	Retail	15,041 sqm
	Childcare	891 sqm
Residential		1255 units
Student Housing		694 units
New Public Open Space		10,615 sqm

Indicative Planning Metrics Table

Vicinity Centres Bankstown Masterplan

Urban Design Statement for Planning Proposal Vicinity Centres Je lie

EC. LL CA

**TE** 

City

鼎

TELW

CALC & & &

Cell.

ACCE ALS

e get a set e set a set

states attates



fjmt studio architecture interiors urban landscape 18122019 – VBRM Urban Design Statement – Rev A

Project Name		Vicinity Centres Bankstown		
Project Code		VBRM		
Document Name		Urban Design Statement		
Document ID		191216-VBRM Urban Design Statement		
Revision	Date	Comment	Approved	
A 18.12.19		Issued for Planning Proposal	DH	

sydney Level 5, 70 King Street, Sydney NSW 2000 Australia t +61 2 9251 7077
 melbourne Level 2, 56 Hardware Lane, Melbourne VIC 3000 Australia t +61 3 9604 2500
 oxford Belsyre Court, 57 Woodstock Road, Oxford OX2 6HJ United Kingdom t +44 1865 29 2042

Iondon 42–43 Upper Berkeley Street, London W1H 5PW United Kingdom t +44 2037 52 6762

#### **w** fjmtstudio.com

Francis-Jones Morehen Thorp Pty Ltd ABN 28 101 197 219 Nominated architect Richard Francis-Jones ARBNSW 5301 Registered architect Richard Francis-Jones Francis-Jones Morehen Thorp Ltd Company no 7384142 ARB 078103G

vicinity centres bankstown masterplan

## Contents

1.0	Introduction 4		5.0	<b>Urban Design Principles</b> 28	
1.1	Executive Summary	4	5.1	<b>Opportunities &amp; Constraints</b>	28
1.2	Subject Site	7	5.2	Urban Design Principles	29
	-		5.3	Urban Design Principles	30
2.0	Context 8				
			6.0	Masterplan 32	
2.1	Historic Context	8			
2.2	Demographic and Cultural Diversity	9	6.1	Urban Design Framework	32
2.3	Strategic Planning	10	6.2	Public Open Space	34
2.4	Existing LEP & DCP	12	6.3	Activation/ Parking Strategy	36
2.5	Air Space Controls & Topography	13	6.4	Street Hierarchy / Public Transport	37
			6.5	Built Form	38
			6.6	Shadow Analysis	39
3.0	Site Analysis 14		6.7	Key ADG Compliance	40
	-		6.8	Planning Metrics	41
3.1	Bankstown Central	14		J.	
3.2	Road Network, Open Space and Pedestrian	16			
3.3	Immediate Context	18	7.0	DCP Diagrams 42	
			7.1	DCP Diagrams	42
4.0	Future Character 20				
4.1	Adjacent Development	20			
4.2	Complete Streets	22			
4.3	New Metro Services	24			
4.4	Planning Principles	26			
	<b>v</b> ,				

portunities & Constraints	28
oan Design Principles	29
oan Design Principles	30

### Introduction 1.0

### **Executive Summary**

Bankstown CBD is at the heart of the diverse and vibrant local communities of the City of Canterbury Bankstown Local Government Area.

The city centre is preparing for a major transformation. The Sydenham to Bankstown Metro, the Western Sydney University Bankstown Campus and private site developments within the CBD will bring improved public transport infrastructure, a new tertiary education anchor and additional commercial, retail and residential floor space.

The City of Canterbury Bankstown's 'Connective City 2036' Local Strategic Planning Statement, the Bankstown CBD & Bankstown Airport Collaboration Area Place Strategy, and the 'Complete Streets' plan are leading the policy direction for the future of the CBD and the broader LGA.

Bankstown Central is the primary shopping centre of the Canterbury Bankstown LGA. Established in 1966 as Bankstown Square, the centre has grown with the local community, providing a place of service, social support, gathering and enterprise.

Vicinity Centres' vision for Bankstown Central is to expand its role in the mixed use centre, supporting greater diversity, activation and integration with the future public domain of Bankstown CBD.

The existing centre is internally focussed with parking dominating the street interfaces around the retail centre. The future of the centre is with active edges, pedestrian streets and new open spaces. Outside dining and events can take the place of on-grade and structured parking. New contemporary workplace buildings, student housing, apartments and street retail can contribute to a healthy ecosystem of functions and sustainable movement between uses.

The Urban Design Statement for the Vicinity Centres Bankstown Masterplan outlines the structure for the future of the centre and supports the Planning Proposal prepared by Urbis Planning.

'Where interesting happens'"

"Expanding Bankstown Central to be the new civic epicenter of this interesting, vibrant and unique multicultural community..."

Vicinity Centres

4



Aerial Map

### Bankstown is 16km south-west of Sydney, in the City of Canterbury Bankstown.

Bankstown lies between the Cooks and Georges Rivers in close proximity to the mouth of the Salt Pan Creek. Bankstown Airport is located to the west of Bankstown CBD providing important aviation training and light aircraft services & logistics to the Sydney metropolitan area.

The expansion of the Sydney Metro network to Bankstown will enhance access to employment and connectivity to services in other centres. A future metro link to Parramatta, Sydney's second Central Business District, will further secure Bankstown's position as an important strategic centre in greater Sydney.

Surrounding the Bankstown CBD, low scale residential neighbourhoods, light industrial and logistics centres characterise the urban form of Bankstown.









Bankstown Library and Knowledge Centre



CBD.

The site is divided by Lady Cutler Drive (in Council's ownership). To the west of Lady Cutler Drive the site is 8.962 ha, to the east of Lady Cutler Drive the site is 2.43 ha, making a total of 11.392 ha.

The existing shopping centre - Bankstown Central is comprised of major retailers as well as other more than 240 stores with extensive on grade parking area on the building roof and surroundings.

The existing Bus terminal sits the northwest corner of the site and provides the bus connections to the surrounding suburbs and the Bankstown airport for the locals and visitors.

The complete site is situated within an 800m walking radius of the Bankstown Station.

Site Mar

## **Subject Site**

### The Bankstown Central site is adjacent to the Bankstown Station and covers a significant portion of the centre of the Bankstown

Appian Way and The Mall, two (2) main streets in the Bankstown CBD adjoin the western edges of the site. Stacey Street (part of the A6) is a main north-south Sydney thoroughfare that adjoins the eastern boundary.

- **1** Existing Train Station
- 2 Future Metro Station
- 3 Existing Bus Interchange
- Subject Site

#### Context 2.0

### **Historic Context**

The First Nations people of Canterbury Bankstown "... lived in a close symbiotic relationship with their environment. The land provided kangaroo, emu, possum, wild honey, plants and roots. Botany Bay, the Cooks River and Georges River provided fish and shellfish." City of Canterbury Bankstown

#### **River Country**

#### The rivers and fertile lands.

The original inhabitants of the Bankstown CBD area were the Darug (Darag, Dharug, Daruk, Dharuk) people of the Eora Nation.

After World War II, migrants predominantly from Europe, settled in the Canterbury Bankstown area and enjoyed the waters of the Cooks and Georges Rivers for recreation and entertainment.

### **Banks Nature and Discovery**

#### Bankstown derives it's name from Sir Joseph Banks.

Recognised as the 'Father of Australia', Joseph Banks participated in Cook's first great voyage, visited the pacific region, documented the flora and fauna of Australia and other Pacific areas, and advocated the colonisation in Australia. Bankstown derives it's name from Sir Joseph Banks.



8

### **Growth from Connection**

#### Bankstown thrives on connection.

In it's early post-colonisation history, Bankstown was isolated and almost abandoned but revitalised after the construction of the Great South Road built by Governor Macquarie. In the early 1900s, the introduction of the Bankstown railway line allowed a significant population expansion. The Bankstown Airport, originally the 'Yankstown' air base, extended the connections to the outside world and brought more opportunity for the development of Bankstown.



## **Demographic and Cultural Diversity**

#### Demographic of Bankstown + Rebranding of Canterbury Bankstown

Bansktown has experienced several waves of migration. English, Irish, Lebanese, European, Vietnamese, African and Syrian. From the 2016 Census, only 17.7% of the Bankstown population spoke English at home and Arabic, whereas Vietnamese and Chinese language speakers covered up to 40% percent of the population. Also, the most common ancestries in Bankstown were Vietnanmese, Lebanese and Chinese.

The ethnic diversity of Bankstown has created a host of restaurants, eateries and cafes. It accommodates variety of celebrations and events such as Bankstown Bites Food Festival, Children Festival and Islamic Prayer Festival. Bankstown is a proud model of Australian multiculturalism.



Language spoken in Bankstown (Source: 2016 Census)







Ancestry in Bankstown (Source: 2016 Census)



### **Strategic Planning**

#### South District Plan / Greater Sydney Commission (GSC)

#### Strategic Centre and Health and Education Precinct

Bankstown is identified as a Strategic Centre and Health and Education Precinct in the Plan. It will be revitalised by the introduction of the Sydney Metro Southwest link.

The plan indicates an additional 83,500 homes will be required across the District by 2036. Based on the 30-minute city aspiration, locations for new jobs and housing and the prioritisation of transport, health, schools and social infrastructure investments will be demonstrated in the strategic centre.

#### Sydenham to Bankstown Corridor Strategy

#### Bankstown Station Precinct is the lasrgest employment centre within the corridor.

The Sydenham to Bankstown upgrade will provide more frequent train services and improve accessibility access to other centres. It also will create the demand and opportunities for urban renewal, new growth and development along the corridor.

The Strategy defines the vision and principles for future development of the station precincts. In this strategy, Bankstown is forecast for one of the largest increases in residential and employment. "Bankstown CBD will be renewed and modernised as it redevelops for increased jobs and homes. Future development around the station will provide a visual marker for Bankstown Station Precinct."

The objectives of the strategy include:

-"Potential to increase the maximum development height to RL 152.4m AHD in the northern portion of the CBD (where Bankstown Central Shopping centre is located) subject to the approval of a 'safety case' by the relevant airport authorities."

The site is proposed to be high rise and mixed use with new streets or pedestrian connections.

The new proposed Bankstown Station Plan enhances the north south link across the railway line, improves the circulation around the station and provides the integrated transport interchange vision of Bankstown Station. A new station square is proposed in this plan within a pedestrian friendly environment.





-"Redevelopment of Bankstown Central shopping centre enhances pedestrian and vehicular permeability and incorporates public open space and investigates the opportunity to relocate the bus interchange (with consultation with Transport for NSW)"



#### **Connective City 2036**

#### Bankstown is to be a major centre for jobs and commerce, retail, medical, civic, education, cultural and night-time economy.

Connective City 2036, the City's Local Strategic Planning Statement, aims to bring together all the critical elements that make a great city and place. It focuses on better quality of, and access to, transport options, protection and enhancement of environmental areas and precious waterways, and a commitment to vibrant centres and quality suburbs.

It demonstrates that Bankstown is the largest major centre for intensive jobs and commerce, retail, medical, civic, education, cultural and night-time economy.

Chapel Road is proposed to be a significant urban spine and destination.

#### **Community Strategic Plan - CBCity 2028**

#### The vision of the city is to be thriving, dynamic and real.

Based on the broad public engagement, CBCity 2028 plan is comprised of one vision, seven destinationa and seven transformations.

The seven transformations are:

- Safe and Strong;
- \_ Clean and Green;
- Prosperous and Innovative;
- Moving and Integrated;
- Healthy and Active;
- Liveable and Distinctive; and
- \_ Leading and Engaged.

#### Bankstown CBD & Bankstown Airport Place Strategy

#### The strategy aims to guide the transformation from a suburban centre into a health, academic, research and training precinct.

In partnership with stakeholders, the Place Strategy endorsed by the Greater Sydney Commission, identifies the collaboration area with different precincts and key places, and establishes the vision for the Bankstown CBD and Bankstown Airport. It focuses on the priorities and actions in terms of connectivity, liveability, productivity and sustainability.

To create a health, academic, research and training precinct in this collaboration area, the strategy builds on the anticipated increase in students (25,000 by 2036), employment (25,000 by 2036) and "preserving land for commercial opportunities and protecting it from residential uses".

It indicates "Bankstown Central is the preeminent retail destination in the region and Bankstown CBD's eastern anchor. It offers a diversity of retail, hospitality, entertainment, commercial uses. It will contribute Bankstown's urban experience by engaging with the surrounding streets and offer finer grain shopfronts."





COLLABORATION AREA

### **Bankstown CBD and Bankstown Airport**

Place Strategy



#### **Complete Streets**

#### The Intent of Council's Complete Streets is to evolve Bankstown CBD to a pedestrian friendly environment with vibrant street life.

The strategy proposes to focus traffic around a city ring-road and introduce traffic calming, shared ways and pedestrian only zones within the city centre as well as the activation of the street frontages.

This approach will involve adaptions to the surrounding vehicular infrastructure including bus routes, car parking, service vehicles and pedestrian travel paths.



### **Existing LEP & DCP**

#### Land Use

#### The land use permitted under current BLEP is B4 Mixed Use zone.

Under BLEP 2015 the site and all of the adjoining sites are zoned B4 Mixed Use. The zoning aims to integrate suitable business, office, residential, retail and other development to support the Bankstown CBD as a major metropolitan centre. The B4 zone optimises land use around the public transport node.

#### Height of Buildings (HOB)

### The maximum current height of buildings permitted under current BLEP is 35 m - 41 m.

The height limit for this site is 41m at the south west corner of the site immediately south of the Bankstown Civic Tower.

The height of buildings in the Bankstown City Centre is evolving consistent with support for renewal and expanded civic, education and employment uses.

The Compass Centre site, directly adjacent between The Mall, The Appian Way and Featherstone Street, has received Planning Proposal approval heights of 72m and 83m, increases of up to 30.4m above the current BLEP allowable heights. The maximum height of a the buildings in the Compass Centre Planning Proposal is RL 105.300 m.

#### Floor Space Ratio (FSR)

### The maximum current Floor Space Ratio permitted under current LEP is 3.5:1.

The maximum FSR is derived from the site specific FSR defined as 3:1 with an additional maximum 0.5:1 applicable to development that includes relevant Sustainable development principles.

Sites immediately adjacent to the west are zoned for an FSR of 4.5:1 under BLEP.

The Compass Centre site, Planning Proposal approval for increased FSR. The Planning Proposal also includes FSR increase to 5:1 based on BLEP allowable FSR of 4.5:1 with an additional 0.5:1 approved based on dedicated Council and Community Centre use.

Consultation with Canterbury Bankstown Council has identified that BLEP 2015 is under review and there is opportunity for the FSR to be reviewed.



#### **Bankstown DCP**

### The site is within the Bankstown CBD Precincts under the current Development Control Plan.

The Bankstown DCP provides the guidelines and development controls to achieve better urban outcomes in the City of Bankstown. The site is located in the Northern CBD Core, one of the Bankstown CBD Precincts identified in the DCP. It outlines the desired character objectives for this precinct and provides the development controls including setbacks, building orientation, pedestrian, active frontages and building design.



## Air Space Controls & Topography

### Air Space Controls

The air space limitation is RL 108.2m in the Bankstown Airport Masterplan.

According to the Bankstown Airport Masterplan 2019 (Preliminary Draft), the site is located in the RL108.2m zone shown on the PANS-OPS map.

Terrace.



#### Topography

#### The site sits below a ridge running roughly between the Cooks River and Salt Pan Creek.

There is a change in elevation of 14m from the highest point, at the corner of Rickard Road and Stacey Street, and the lowest corner, at The Mall and South

The most intense rise is to the north east in the portion of the site, east of Lady Cutler Ave.

### **Site Analysis** 3.0

### **Bankstown Central**

In the last fifty years, Bankstown Central has grown from the Bankstown Square to a major regional shopping centre. As a destination for locals and visitors, it adds significant value to the Bankstown CBD and can evolve with the city centre to deliver improved urban environments.

#### **History of Bankstown Central**

#### The shopping centre of Bankstown for more than 50 years.

Established as 'Bankstown Square' in 1966, it was the largest shopping centre in Sydney and Australia and became the centre of the community and governmental service provision for south-western Sydney. With changes of ownership, the centre was renamed 'Centro Bankstown' in 2003 and rebranded to 'Bankstown Central' in 2013.

#### **Construction Timeline**

#### Continued to grow with Bankstown.

Chronology of construction is approximately:

- Around 1961: Western building, now Target
- 1965: Central building, south of The Mall
- 1979: Northern building, now Kmart
- \_ Unknown: Bridge link between Western building and 1965 Central building
- \_ 1989: Southern carpark structure, west
- \_ Unknown: Southern carpark structure, centre
- \_ 2003: East of Lady Cutler Drive, also known as Zone A
- \_ 2007: South east carpark entry off Lady Cutler Ave

#### **Existing Performance**

#### A major regional shopping centre and an attractive node.

Currently, Bankstown Central is anchored by major retailers Myer, Big W, Woolworths, Kmart, Target and Supa IGA as well as more than 250 specialty stores. It provides the convenience for the daily life of the locals and also generates great employment demands. It becomes the destination and identity of Bankstown and will continue to contribute to the local communities.

Key metrics of the shopping centre include: \_ Gross Lettable Area (GLA): 85,900sqm \_ Car Spaces: 3,300

According to the investigation of the Complete Streets project launched by the city council, the Bankstown Central provides a range of spaces and facilities to attract and gather people in the daily life of Bankstown.



The Grand Opening of the Bankstown Square in 1966 (Source: Shirley Bongers)





(Source: Bankstown Complete Streets, City of Canterbury Bankstown)

#### **Tenant Lease Status**

#### Lease of some anchor tenants over 20 years.

The leases of anchor tenants is a key consideration in the renewal approach and staging strategy of Bankstown Central. Large footprint tenants including Big W and Woolworths, have continuing leases of greater than 20 years.

#### On grade parking and loading

#### On grade parking opportunities.

The shopping centre provides extensive on grade car parking which covers a large propotion of the site and a number of loading docks serving for the retailers exist around the site. The parking and loading affect the pedestrian connections and the quality of the urban envrionment. Along with the new metro system and change of transit patterns in Bankstown there is significant opportunity to transform the surface parking areas to active frontage streets and open spaces.

The existing loading includes:

- 1. Above ground loading dock serving IGA, Best & Less, Lincraft. Access from The Mall.
- 2. Below ground loading dock serving Kmart, Myer. Access from North Terrace.
- 3. Above ground loading dock serving JB-Hi-Fi. Access from Lady Cutler Ave.
- 4. Below ground Loading dock serving Woolworths. Access from Lady Cutler Ave.
- 5. Above ground loading dock serving Big W. Access from North Terrace.









Existing Street Views / The Appian Way (above) and the Lady Cutler Ave (bottom)

Anchor Tenants Lease Expiry Overlay

Existing retail buildings provide limited active frontage to the street and no outdoor green space and public amenity in the site. Renewal will present the opportunity to prioritise pedestrian and improve the vitality of the local streets accompanied with the urban renewal process.

#### Limited active frontages, green space and amenity

#### Large bulk retail buidings limit the provision of open space and public amenity.

### **Road Network, Open Space and Pedestrian**

### **Road Network**

The site is mainly surrounded by arterial roads with heavy traffic flows especially Stacey Road, Richard Road and the North Terrace. Although the most commonly used entry point to the shopping centre is located on the Lady Cutler Ave, it also carries the serivce and loading traffic. It is possible to mitigate the impact of the traffic flow, revitalise the local streets, create more pedestrian friendly environment with extensive tree canopy in the renewal project.

The bus route lies on the west edge of the site however, the proposed changes to the bus interchange and the new proposed metro station will allow the road system to be adjusted to enhance the quality of the streetscape.



- Main Road with High Traffic Volume
- Neighbourhood Street
- Shared Zone

-

- --- Major Bus Route
- Existing Railway Line and Station
  - Subject Site

#### **Open Space**

There is currently no green space or other communal amenity directly within the site area.

The majority of the site is within 400m radius to the Paul Keating Park which features a linear playground and seating areas.

The site is not fully covered by the 400m catchment of the surrounded neighbourhood parks and Rickard Rd and the Stracey St present barriers to access.





### **Pedestrians**

Pedestrian flows in Bankstown CBD north are currently driven by existing centre entries and adjacent site uses.

Analysis indicates that the highest used pedestrian entries are either side of Lady Cutler Drive. The next most used entry is at Jacobs Street.

A limited pedestrian activity review was undertaken by Arup in February 2017 as part of a Metro Integration and Bus Strategy report prepared for Transport for NSW. This report concluded that the city network for pedestrians was difficult to navigate due to reduced sight lines and dogleg routes.

An overlay of pedestrian walking distance shows that from the key existing CBD locations such as the train station and Bankstown Library, it takes 5 minutes to walk to the midpoint of the site.





## **Immediate Context**

Bankstown CBD is a true regional centre with civic buildings, open space, public transport and local services. Bankstown Central is a significant land holding in the Bankstown CBD and can contribute its growth and evolution.

#### **Immediate Context**

Bankstown Central is on the north side of the rail line within the Bankstown Central Business District. The north guarter includes the Bankstown Library and Knowledge Centre, Bankstown Court House, the Civic Tower and Paul Keating Park. To the south of the rail line, the Bankstown Sports Club and street facing retail provide an active dining precinct during the day and evening.

### **Adjecent Community Facilities**

- Bankstown Library and Knowledge Centre
- Paul Keating Park
- Bankstown Court House
- Bankstown RSL Club
- Bankstown Art Centre
- TAFE NSW Bankstown
- Bankstown Public School
- Bankstown Girls High School
- Bankstown Sports Club



- [\_\_\_\_] Subject Site Transport Corridor Urban Spine Central Business Urban Precinct Civic Precinct High-mid-rise Residential Precinct
  - Low-rise Residential Precinct





Bankstown Central is located north of the rail line and east of the primary urban functions and public core of Bankstown. To the north and east of the subject site are areas of predominantly low to medium density residential.

Bankstown Station
 Civic Tower
 Hoyts Bankstown
 Bankstown Library and Knowledge Centre
 Paul Keating Park
 Bankstown Court House
 Bankstown RSL Club
 Bankstown Art Centre
 TAFE NSW Bankstown
 Bankstown Public School
 Bankstown Girls High School
 Bankstown Sports Club

## 4.0 Future Character

## **Adjacent Development**

The common vision for Bankstown is for a more liveable, vibrant and integrated urban centre. Public and private investment and renewal in Bankstown can bring greater diversity, quality and amenity with improved connections to other Sydney centres.

### 1 Compass Centre

#### 83-99 North TCE & 62 The Mall (Mixed Use Development)

The site is being considered for a mixed use development, which involves the demolition of all existing commercial premises and trees as well as the construction of 4 residential towers of 19-24 storeys above podium and two levels of basement carpark.

Site Area: 10,122sqm

Proposed FSR: 5:1

Max. Building Height: 72m (with 83m only at the NE corner)

Proposed GFA: 50,610sqm

Council administration: 4,426sqm

Retail and commercial premises: 7,054sqm

Apartment Units: 471

Communal open space: 4,012sqm (39.6% of site area)

### **2** 32 Kitchener Parade

#### (Mixed Use Development)

The site is proposed to demolish the former Bankstown RSL buildings and facilities and accommodate 5 mixed use buildings ranging in height from 10-storeys to 14-storeys, containing ground and first floor retail and commercial tenancies, communal open space, child care centre and apartments.

Site Area: 13,270sqm

Proposed FSR: 3.5:1

Max. Building Height: 47m / 35m

Apartment Units: 516

Communal open space: 20% of site area

### **3** Western Sydney University - Bankstown Campus

#### A Landmark building for integrated education and research

The proposed Bankstown City Campus will establish a suite of education and research programs to reflect the new highly accessible location in the north of the Bankstown CBD that will improve access to education facilities by public transport. The new flagship campus will offer world class opportunites for strong industry, community and business linkages.

Building Height: 83.05m (RL 106.78m)

GFA: 29,266sqm





CBD.

# The Bankstown Central site is adjacent to the Bankstown Station and covers a significant portion of the centre of the Bankstown

Proposed new developments will reshape the skyline of the CBD, increase employment opportunities and accommodate new residents.

1 Compass Centre

2 32 Kitchener Parade

3 Western Sydney University - Bankstown Campus

## **Complete Streets**

The City of Canterbury Bankstown has developed a detailed strategy for the future quality of streets in and around the Bankstown CBD. The strategy promotes active transport (walking and cycling) and prioritises the quality of the public domain.

Complete Streets is a forward looking and positive intitative for the urban design future of Bankstown. The strategies recommendations are drawn from clear analysis and sound urban principles.







Street montages from Complete Streets



vicinity centres bankstown masterplan



### **New Metro Services**

The City of Canterbury Bankstown is working actively with state authorities to achieve the best public transport and public domain outcomes for the new Bankstown Metro Station.

#### **Connecting North and South**

The existing rail line and Bankstown Station separates the north half of the CBD from the south with limited connectivity provided through the station concourse and via dispersed street underpasses and bridges.

A new Bankstown Station would allow the pedestrian linkage of Appian Way (north) to Restwell Street (south) to be realised, significantly improving the connectivity and legibility between the north and south CBD precincts.

#### **New Metro Station and Integrated Development**

#### 3 Options of the new metro station

To support the development of Bankstown as a Strategic Centre, the Bankstown Station Precinct Masterplan released in June 2019, explores opportunities and approaches to deliver a well-integrated station precinct as well as an exemplary interchange and gateway to the Bankstown CBD.

Three concept options have been developed in the masterplan which comprise at grade, underground and viaduct scenarios. The considerations of the concept options include the the function and status of the precinct, different rail typologies, different mixes of public domain, open space and other land uses, varying density and built form in the precinct and different approaches to bus and pedestrian connection which will influence the adjacent development especially the Bankstown Central site.







Extracts from Bankstown Station options

## **Planning Principles**



A revitalised Bankstown Central integrates the creation of a strong address and unique identity evolving from Bankstown's history and culture. It reinforce the indigenous sense of place and identity.



To provide a mixed use urban area with flexibility to respond to the different current needs, the changes in markets and a range of future uses.



To enhance the effectiveness and density of connections in this area and improve the accessibility of the urban precincts. To offer clear pathways, permeable boundaries and clarity of way-finding.



4







To transfer the large retail building into fine grain urban blocks to support Bankstown CBD to be an strategic centre exemplar. Promotion of design excellence and activation of the streets will be applied in the plan to create an attractive and vibrant precinct.



Vicinity Centres has developed 14 unique Planning Principles to guide the masterplan for the Bankstown Central renewal.

26



To encourage and support the integrated public transport system including the railway and bus and balance the provision of



Significantly reduce the long term footprint of the development by implementing innovative technologies. Support resilience and safe places for communities with enhanced performance and amenity.





The enhancement of the pedestrian networks and bike routes in the masterplan. Aim to provide convenient, continuous, safe pedestrian paths and shared zone with shade and facilities.



To provide a variety of open spaces to facilitate a range of social needs for all ages and all cultures and to evolve the open space networks in the Bankstown CBD.



The featured landscape will demonstrate the local character and identity and also respond to the topographic context.









francis-jones morehen thorp

Integrate Water Sensitive Urban Design into the infrastructure and landscape in the Bankstown centre to mitigate environmental degradation and to provide improved urban ecology and amenity.



Reduce and mitigate the impact of the redevelopment to the local communities and nature. Improve the living conditions and amenity by providing quality open spaces and facilities.



movements through the precincts.







The natural context and topography is embraced to create a layered network of ground planes. Integrated landscape and built

form on the site as well as provide barrier free pathways and



To create a welcoming, amenable, and healthy precinct with sufficient sunlight, natural ventilation, greenery streets, quality open space and mitigate urban heat impact.





The whole site development is constrained by the existing retail buildings and established tenant leases. The staging is related to the building condition, lease expiry and market conditions. The masterplan proposal focuses on first stage of development.



## **5.0 Urban Design Principles**

## **Opportunities & Constraints**

The on grade and structured parking surrounding Bankstown Central presents a significant opportunity for the introduction of new uses, active frontages, public domain improvements and open space that benefit the Bankstown CBD and the local community.

### **Opportunities**

.

• Creating a high density compact urban precinct around the station with fine grain.

Creating effective connections to the existing civic and cultural

- High Renewal Potential
  Potential Connections
  Potential Landmark
  Potential Street Activation
  Subject Site
- centre and the surroundings.Evolving the Bankstown Health and Eductaion Precinct.
- Supporting the Bankstown CBD to facilitate the increased employment and residential growth integrated with the public transport.



#### Constriants

- Existing Bankstown Central operations and extended leases.
- Rail line barrier separating north and south CBD precincts.
- Heavy traffic flows and noise from Rickard Road, North Terrance and Stacey Street.
- Large shopping centre parking and loading requirements.
- Bus movements to Bus Interchange.





Existing Bus Interchange
Existing Retail building close to the station
Existing Car Parking
Existing Railway Line
Heavy Traffic As Barrier
Retained Shopping Centre with Long Lease Anchor Tenants
Subject Site

The City of Canterbury Bankstown has undertaken an urban design principles study of the Bankstown Central site, and surroundings, and has developed an indicative Structure Plan.

The Structure Plan prepared by City of Canterbury Bankstown establishes a series of principles around streets, open spaces, active frontages, urban form and use.



## **Urban Design Principles**

### **Structure Plan**

The Structure Plan is high level and assumes that the existing Bankstown Central shopping centre site is unconstrained.

The exisiting centre and long term leases extend over a number of the key interventions of the structure plan. In order to deliver on the principles, Vicinity Centres has developed an adjusted strucure plan that acommodates the medium to long term constraints of the subject site.
## **Urban Design Principles**

Key urban design principles are integrated in the Bankstown Central Masterplan, enhancing connectivity, permeability, liveability and flexibility in the Bankstown CBD.

#### East West Link through the Site

The City of Canterbury Bankstown Structure Plan proposes an east-west pedestrian boulevard as an extension of The Mall through the Bankstown Central site. The timeframe of the delivery of the major east-west link is likely to be greater than 25 years.

The extension of the Mall is impacted by the footprint and ongoing functioning of the retained shopping centre. The majority of the east-west boulevard would be delivered in 2045. The change in elevation along this alignment would introduce many interface constraints between the boulevard and the retained portions of Bankstown Central.

The indicative schedule of the structure plan 20m link proposal includes four stages:

- \_\_\_\_ Stage 1: West part of the link will be delivered at around 2023;
- \_\_\_ Stage 2: North end part of the open space at around 2026;
- Stage 3: Major proportion of the open space at around 2031 with the demolition of Kmart site. \_
- \_ Stage 4: Major part of the link and the south end part of the open space at around 2045 with the
- more demolition of the shopping centre.

An alternative east-west pedestrian boulevard is proposed in the Bankstown Central masterplan. The link aligns with Civic Drive and provides a valuable connection between the new City Park, Paul Keating Park and the Bankstown Library and Knowledge Centre.

- The indicative schedule of the masterplan 16m link proposal includes 3 stages:
  - Stage 1: West part of the link will be delivered at around 2023;
- Stage 2: North end part of the open space at around 2026;

\_

\_ Stage 3: Major part of the link and the open space at around 2031 with the demolition of Kmart site.

Consistent with the principles of the Council Structure Plan, the Bankstown Central masterplan delivers the primary pedestrian priority streets and will greatly improve the permeability of the site. Working with the constraints of the existing retail shopping centre, the masterplan proposes a major east-west link, the Garden Boulevard, located in the north of the site and connecting the major new open space and the existing cultural and civic centre to the west.

The proposed City Park is a key new 4,500sqm open space, meeting the target range of 3,000 - 5,000sqm in the Council Structure Plan. Also, a variety of pocket parks and open spaces are created and contributesto the open space network in the Bankstown CBD.

The street activation strategies and transport proposals are consistent with the Structure Plan and will improve the streetscapes and pedestrian environment of the CBD.



Structure Plan Proposal: New link along the extension of the Mall



Masterplan Proposal: New link along the Proposed Boulevard

Structure Plan overlays the masterplan key principles



#### **Connectivity and Fine Grain**

The principle aims to enhance connections to the key nodal points in the Bankstown CBD including the station, the civic centre, the new campus, Paul Keating Park and the schools surrounding the site.

Extending connection paths through the masterplan and linking with existing retail centre arcades will improve legibility and permeability.

Providing streets, lanes and arcades that offer alternaitve routes through the site area and avoid large uninterrupted blocks is the intent of this principle. A fine grain approach leads to variety in scales in the public domain and variety in streetscapes.

The Bankstown Central masterplan will integrate with existing street networks and introduce mid block connections for pedestrians, particularly in the area around Bankstown Station.

A network of open spaces and green streets supports a diversity of movement and activities through the public realm. A range of spaces can support different scales of community gathering and events for diverse ages and groups.

**Open Space and Landscape** 

Landscape forms a connective web between open spaces, providing tree canopy, reducing the heat island effect, and increasing pedestrian amenity.

Staging

Indicative Staging Scheme:

- \_ Stage 1: Bus Precinct
- Stage 2: Town Centre
- Stage 4: North Terrace Centre
- \_ Stage 6: Woolworths N/E
- \_ \_ Stage 7: Woolworths S/W







Open Space Structure Plan

Indicative Staging Plan

A staging strategy is integral with the masterplan for Bankstown Central's urban renewal. With consideration of the available land, the operation and lease expiries of the retail centre, the proposed infrastructure upgrades, and the local market conditions, the site is proposed to be delivered in 7 stages, excluding the retained extent of the existing centre. The 7 stages are indicated on the staging map below. The renewal is a long term vision with the full masterplan to be delivered over a number of years.

Stage 3: North Terrace West + Rickard Road North Stage 5: North Terrace East + Rickard Road South

2020-2023 2021-2025 2022-2026 2024-2026 2030-2034 2032-2034 2033-2035

## 6.0 Masterplan

## **Urban Design Framework**

Bankstown Central will be a major contributor to the streetscapes and urban form of the future Bankstown CBD, embracing the public infrastructure improvements and welcoming new complementary development to Bankstown.

#### **Masterplan Configuration**

The Bankstown Central masterplan proposes a number of key initiatives.

#### **1** Town Centre

The town centre creates a new mixed use city block of street facing buildings, pedestrian lanes and plaza spaces. In combination with the Jacobs Street extension (2), the town centre reduces the floorspace of Bankstown Central and returns space to the public domain.

New employment space would be delivered directly across from Bankstown Station. Activated frontages at street level would bring life to Appian Way, the Mall and Jacobs Street.

Pedestrian lanes would support diagonal movement through the town centre to Bankstown Central and the new green streets and open space.

#### 2 Jacobs Street Extension

The extension of Jacobs Street through to North Terrace introduces a new section of public street that opens up the opportunity to reconfigure movement through the Bankstown CBD, particualry for buses.

Jacobs Street (south) could be configured as a shared way providing priority for pedestrians and public transport.

### **3** City Park

A new major open space positioned at the end of Sir Joseph Banks Street and linked to Paul Keating Park by the Garden Boulevard (4). City Park is a green space for use by the community for recreation and events.

City Park will contribute new tree canopy and deep soil in the heart of the Bankstown Central masterplan.

#### 4 Garden Boulevard

The Garden Boulevard and City Park create an east-west green boulevard that links with Paul Keating Park and Appian Way for a Bankstown CBD green network.

### 5 North Mixed Use Precinct

A mixed use precinct with ground level retail fronting the Garden Boulevard and City Park. The North Precinct would enable delivery of the open space and green street.

#### 6 South Mixed Use Precinct

The South Precinct replaces structured parking with a mix of uses including commercial space close to Bankstown Station. Street and laneway spaces between the built form provide acces to the existing centre and aid permeability.

#### 7 Lady Cutler Ave

The character of Lady Cutler Avenue would be changed to promote traffic calming and prioritise pedestrians, enhancing the safety, quality and vitality of the street.



	Green Core	
	Town Centre (High Density with Multi-function)	
	Mixed Use Precinct (Commercial Domain)	
	Mixed Use Precinct (Residential Domain)	
-	Retained Retail Precinct	
	Civic, Education & Culture Precinct	
	Public Transport Hub	
÷	Major Open Space Corridor	
€>	Major Connection	



The Bankstown Central masterplan captures a vision for a mixed use and green urban setting that provides active edges and pedestrian focused spaces where there are currently in active edges and structure carparks.

The masterplan presents a unique urban centre supported by public transport, complete streets, open space networks, multiple urban functions and amenities with potential for local identities and characters.

Bankstown Train Station
Bankstown Metro Station
Retained Retail Building
City Park
Event / Play Space
Plaza
Garden Boulevard
Jacobs Street Food Precinct
Pedestrian / Bus Shared Way
Bankstown Mews

## **Public Open Space**

The City Park and Garden Boulevard are new people spaces integrated into the public domain network of Bankstown CBD.



#### City Park and Garden Boulevard

The primary open spaces of the City Park and Garden Boulevard complement the pocket parks and squares in the Town Centre precinct and on the current bus interchange site.

The public domain is simple and flexible giving a strong civic character and timeless quality.

Events such as markets can be arranged along the Garden Boulevard moving to a community focus around the City Park.



Indicative A-A' Section of the Garden Boulevard and the City Park



Wulaba Park, Waterloo



Chippendale Green, Central Park Sydney







Indicative Landscape Masterplan

Providing a variety of open spaces including a city park, a playground, an urban plaza, a food precinct, a garden boulevard to accommodate the different public events and activity needs.

The Garden Boulevard is designed to be the green corridor through the site, is extended and connected to the civic centre and the library and knowledge centre with quality landscape features and broad tree canopy.

The City Park, as the open space focus, provides the gathering and entertaining opportunity for the local community. An urban plaza is proposed in the Town Centre precinct..

The open spaces are linked by the varied pedestrian connections including arcades through the retail buildings, pedestrian paths and shared ways.



#### **Open Space Network**

## **Activation/ Parking Strategy**

Urban renewal of Bankstown Central presents a significant opportunity to prioritise pedestrian movement, revitalise streets, and enhance the balance and effectiveness of parking in the Bankstown CBD.

#### **Active Frontage**

#### **Parking Strategy**

New active frontages are proposed for the Bankstown Central site to enhance the guality of the streetscape, improve the safety and amenity, and to improve the street life of the north-east quarter of Bankstown CBD.

The activation will focus on the town centre precinct and primarily along the boulevard and shared ways (Jacobs Street extension and Lady Cutler Ave) proposed in the masterplan.

The preliminary parking strategies include providing on-street parking and balancing diverse traffic movement and parking needs for all users.

Two levels of basement car parking are assumed in the masterplan and will provide more parking spaces to respond to the new commercial and residential development. For detailed traffic and parking information refer to the specialist traffic consultant report.

#### Street Extension

The Mall

extensions are proposed in the masterplan.

The extension of the Mall is a key east-west through site connection. It will be delivered as a mix of single and double height arcade spaces within the retained shopping centre. The arcade will be conceptually approached as a top light internal street.







Potzdamer Platz Arkaden, Berlin, Germany

To establish a fine grain urban pattern in the Bankstown CBD, two street The extension of Jacobs Street as a major north-south link will facilitate the bus layover and provide a pedestrian friendly street in the site with significant street trees and street furnitures. The extension will align with the existing Jacobs Street and maintain an equivalent road reserve width.



Indicative Jacobs Street Extension

# **Street Hierarchy / Public Transport**

#### **Street Hierarchy**

#### **Public Transport**



## **Built Form**

The renewal of Bankstown Central and the enhancement of the public domain is enabled by increased building heights that allow the redistribution of floor space.

#### **Building Height**

#### Proposed maximum building height is the PANS-OPS height plane, RL 108.2M.

Bankstown Central is currently characterised by low scale, very large floor plate retail buildings surrounded by surface and structured parking. The shared vision for the Bankstown CBD is for greater permeability, pedestrian amenity, open space and active edges.

The indicative masterplan shows that new street extensions, green pedestrian environments and mixed uses can be integrated with a reduced size shopping centre. The indicative masterplan redistributes the allowable floorspace into taller, separated buildings that can be modulated to mitigate environmental impacts to surrounding developments.

The Site is currently limited to 35m and 41m maximum building height controls in the LEP which would not allow the floor space distribution required to deliver the urban structure and public domain improvements. The Bankstown Airport masterplan identifies the PANS-OPS limitation for the site at RL 108.2M.

The adjacent future development in the Compass site and the new WSU campus, have proposed new development with building heights up to the PAN-OPS limitation. Consistent with the new urban character, a maximum building height of 108.2M is proposed for the Bankstown Central site.

The building height of each individual building will be investigated and modulated in the DA stage based on the consideration of the skyline and the shadow impact to neighbourhoods, the open space and the garden boulevard.

The principles of taller buildings closer to the station and along North Terrace with landmarks on the corners of the site are able to be incorporated in the building heights of the Bankstown Central masterplan.











Existing Solar Access of the Southern Neighbourhood Building





Indicative Shadow Impact to the Southern Neighbourhood Building

#### **Shadow Impact**

Solar analysis has been undertaken to assess the environmental impacts of increased building heights and to mitigate any potential overshadowing to neighbouring residences and to maximise the sunlight hours to the public domain.

Scenarios with different building height modulation have been investigated under the maximum building height (the PANS-OPS) control and the FSR 3.5 target of the site. Higher building forms are concentrated in the Town Centre site and along the North Terrace, with landmark buildings on the North East, South East corner of the site.

Shadow analysis confirms that minimum (or greater) sunlight hours can be maintained to existing apartments to the south of Bankstown Central.



Solar Access of the Proposed Open Space

## **Shadow Analysis**

The shadow analysis demonstrates that the new open space proposed in the masterplan can achieve the solar access target of at least 50% of the City Park receiving minimum 4 hours of direct sunlight between 10am - 3 pm on 21 June.



## **Key ADG Compliance**

The Apartment Design Guide sets out measurable criteria for apartment design with a focus on space standards and amenity.

The indicative masterplan aligns with the minimum requirements of the Apartment Design Guide [ADG] including building separation and orientation. The proposed massing is able to meet compliance in terms of solar access, natural ventilation and privacy.

Most of the residential buildings in the indicative masterplan are oriented to face north with four east-west orientation buildings. The solar analysis heat maps indicate that the buildings have sufficient direct sunlight access with the north, east and west facades. The floor plans of each residential building will be developed in the DA stage to meet the solar access requirement of ADG.



Indicative Heat Map (View from North East)

Indicative Heat Map (View from North West)

Indicative Heat Map (View from South East)

### **Planning Metrics**

#### Site Area

Overall GFA (including new GFA & Retained Shopping Centre GFA)

#### **Overall FSR**

	Commercial Office
Employment	Hotel
	Retail
	Childcare
Residential	
Student Housing	
New Public Open	Space

Indicative Planning Metrics Table

## **Planning Metrics**

Area / Quantity
113,920 sqm
395,415 sqm
3.5:1
105,996 sqm
656 (+84 Serviced Apartments) rooms
15,293 sqm
891 sqm
 929 units
 1664 beds
7,313 sqm

## 7.0 DCP Diagrams

## **DCP Diagrams**

The Bankstown Central urban renewal will be defined and guided by development controls in relation to building height, setbacks, street walls and building separation for the quality and amenity of the urban environment.

#### Setback & Street Wall

Street	5	Setback	
	Primary Setback	Secondary Setback	Street Wall Height
The Appian Way	Nil	6-8m	2-4 storeys
Rickard Road	Nil (Commercial)	6-8m	2-6 storeys
Nickard Noad	3m (Residential)	0-011	2-0 Storeys
North Terrace	Nil	6-8m	2-6 storeys
Garden Boulevard	Nil	8m	2-4 storeys (South)
	NII -	om	1-2 storeys (North)
Jacobs Street	Nil	6-8m	2-6 storeys
The Mall	Nil	6-8m	2-6 storeys
Lady Cutler Ave	Nil	6-8m	2-6 storeys

#### **Building Separation**

- \_ 6M for commercial to commercial
- \_ 9M for commercial to Hotel
- \_ 12M for commercial to residential
- \_\_\_\_ 12M for hotel to hotel
- \_ 24M for residential to residential (including student housing)





#### **Building Height Control**

Informed by building height investigations, adjacent new developments and the future urban character of the Bankstown CBD, the maximum building height across the whole subject site is proposed to be the PANS-OPS (RL 108.2m).



Bankstown Shopping Centre Site





Indicative Section throught the site (from South to North)

		Π	PANS-OPS RL108.2
	Max. BH 35m (LEP)		
			_
Lady Cutler Ave	Retained Shopping Centre	Stacey Street	Existing Residential

Indicative Section throught the site (from West to East)







Section 5: Rickard Road (Option1-Mixed Use)



North

fjmt

architecture interiors urban landscape

**Sydney** Melbourne Oxford London

VICINITY CENTRES

TRANSPORT ASPECTS OF PLANNING PROPOSAL FOR PROPOSED MIXED USE DEVELOPMENT, BANKSTOWN CENTRAL SHOPPING CENTRE

DECEMBER 2019

COLSTON BUDD ROGERS & KAFES PTY LTD ACN 002 334 296 Level 18 Tower A Zenith Centre 821 Pacific Highway CHATSWOOD NSW 2067

Telephone:(02)94112411Facsimile:(02)94112422Email:cbrk@cbrk.com.au

REF: 11321

\_

## TABLE OF CONTENTS

١.		. I
2.	EXISTING CONDITIONS	3
3.	TRANSPORT REVIEW FOR PLANNING PROPOSAL	5

### I. INTRODUCTION

- 1.1 Colston Budd Rogers and Kafes Pty Ltd has been retained by Vicinity Centres to review the transport aspects of a planning proposal for mixed use development at Bankstown Central shopping centre on Stacey Street, Rickard Road and North Terrace at Bankstown. The site location is shown in Figure 1.
- 1.2 The existing centre provides some 81,000m<sup>2</sup> GLA and 3,300 parking spaces. It has frontage to, and vehicular access from, Stacey Street, Rickard Road, Jacobs Street, The Mall, The Appian Way, North Terrace and Lady Cutler Avenue.
- 1.3 The existing planning controls provide for a 3:1 floor space ratio (FSR) for the site and permit mixed use development. There are provisions to allow a bonus 0.5:1 FSR.
- 1.4 The planning proposal would provide for mixed use development, including retail, commercial, hotel, residential, student accommodation, serviced apartments and child care, with a FSR of 3.5:1. The planning proposal also seeks to amend the height controls for the site.
- 1.5 The Sydenham to Bankstown Urban Renewal Corridor Strategy has been released. Additionally, the Sydenham to Bankstown railway line is being upgraded and converted to metro as part of the Sydney Metro City and Southwest rail project.

- 1.6 The scale of development envisaged in the planning proposal would include some 18 buildings, largely around the perimeter of the site. The additional development would include some 110,000m<sup>2</sup> commercial, 1,800 rooms for student accommodation, 550 hotel rooms, 100 serviced apartments, 1,000 residential apartments and a child care centre. The existing retail uses on the site would reduce by some 7,000m<sup>2</sup>. The redevelopment would provide improved connections to and from Bankstown station.
- 1.7 This report reviews the transport implications of the planning proposal through the following chapters:
  - Chapter 2 describing the existing conditions; and
  - Chapter 3 reviewing the transport implications of the planning proposal.

### 2. EXISTING CONDITIONS

### Site Location and Road Network

- 2.1 Bankstown Central shopping centre is north of the railway line within the Bankstown CBD and has frontage to Stacey Street, Rickard Road, North Terrace, Jacobs Street, The Mall, Lady Cutler Avenue and The Appian Way as shown in Figure 1. It is immediately north of the Bankstown railway line and Bankstown station.
- 2.2 The existing centre provides some 81,000m<sup>2</sup> GLA and some 3,300 parking spaces. Parking areas are provided north of the centre (between the centre and Rickard Road), south of the centre (the North Terrace car park) and on the eastern part of the site (east of Lady Cutler Avenue). Access to parking is provided from Stacey Street, Rickard Road, Lady Cutler Avenue, North Terrace, Jacobs Street and The Mall.
- 2.3 Surrounding land use in the Bankstown CBD includes commercial and retail development to the west and medium to higher density residential development to the north. Bankstown railway station is immediately south of the site. There is a railway underpass between North Terrace and South Terrace, adjacent to the site.
- 2.4 The road network in the vicinity of the site includes Stacey Street, Rickard Road, North Terrace, Wattle Street, Lady Cutler Avenue, Jacobs Street, Sir Joseph Banks Street, The Mall and The Appian Way.

- 2.5 Stacey Street forms part of a north-south arterial route, connecting Bankstown with Menai and Heathcote in the south and Silverwater and Carlingford in the north. Through Bankstown, Stacey Street generally provides a four lane undivided carriageway with two traffic lanes in each direction. It is elevated over the Bankstown Railway Line where it passes the centre. Clearways operate in peak periods. Stacey Street has signalised intersections with Greenacre Road, Rickard Road and the Wattle Street ramp, where it also provides signalised access to the shopping centre. These intersections provide additional lanes for turning traffic.
- 2.6 Rickard Road runs east-west on the northern side of the Bankstown CBD. It provides part of a ring road for the CBD. Rickard Road generally provides a four lane carriageway with two traffic lanes in each direction. It has signalised intersections with Jacobs Street, Sir Joseph Banks Street and Lady Cutler Avenue.
- 2.7 South of the site, North Terrace runs parallel to the railway line and passes beneath Stacey Street where it joins Wattle Street. North Terrace generally provides for one traffic lane in each direction, clear of intersections, with angle parking on its southern side. At its western end it is one-way westbound. It provides access to Bankstown railway station and bus interchange. Its intersection with Lady Cutler Avenue is controlled by traffic signals.
- 2.8 Lady Cutler Avenue links North Terrace with Rickard Road. Both intersections are controlled by traffic signals. Lady Cutler Avenue provides access to parking areas for the centre. It provides a four lane undivided carriageway with two traffic lanes in each direction. There is a signalised pedestrian crossing between the Lady Cutler car park and the centre.

- 2.9 Jacobs Street and Sir Joseph Banks Street provide local access into the CBD from the north. They generally provide for one traffic lane and one parking lane in each direction, clear of intersections. They provide access to commercial development close to the CBD and low to medium density residential development further north.
- 2.10 The Mall links Chapel Road with Jacobs Street. Between Fetherstone Street and The Appian Way, The Mall is one-way eastbound. This section of The Mall combines with The Appian Way, North Terrace and Fetherstone Street to provide one-way circulation around the block fronting these streets. These roads generally provide two traffic lanes and two parking lanes in the one-way sections.
- 2.11 The Appian Way is one way south from Rickard Road to The Mall, where it is closed. It provides access to parking in the civic precinct which includes Council offices, the Town Hall and Paul Keating Park.

### Planning for the Area

- 2.12 The Sydenham to Bankstown Urban Renewal Corridor Strategy has been released. It identifies a potential additional 36,000 dwellings and 10,000 jobs in the corridor by 2036. For Bankstown, the strategy includes the following:
  - Bankstown will continue to provide shops, jobs and community services for the wider corridor to support the District Centre's employment target;
  - a potential station square will be the heart of Bankstown Station Precinct enhancing pedestrian activity and providing new north-south connections;

- future development around the station will provide a visual marker for Bankstown Station Precinct;
- Bankstown CBD will be renewed and modernised as it redevelops for increased jobs and homes.
- 2.13 The Bankstown Station Precinct Plan will include a new metro station and interchange. This work will be undertaken in association with the Sydenham to Bankstown railway line upgrade and conversion to metro as part of the Sydney Metro City and Southwest rail project.
- 2.14 This rail project will provide for 15 services per hour at peak times. Trains will stop at all stations and will connect, via the wider network, to Martin Place, Barangaroo, North Sydney, Chatswood and Macquarie Park. There will be interchange facilities with other rail services at Sydenham, Central and Martin Place.
- 2.15 In association with the Sydenham to Bankstown Urban Renewal Corridor Strategy, an Integrated Transport Strategy<sup>1</sup> has been prepared. The strategy "recommends a range of transport initiatives that would be required to support the urban renewal corridor strategy while complementing the proposed Sydney Metro City and Southwest project. The recommended initiatives will improve accessibility locally and between the corridor and other major destinations at Sydney Olympic Park, Parramatta, Liverpool and Burwood."
- 2.16 The vision for the transport system includes the following:

<sup>&</sup>lt;sup>1</sup> "Sydenham to Bankstown Urban Renewal Corridor Integrated Transport Strategy." Prepared by ARUP, 25 October, 2015.

- Supporting urban renewal to provide more housing choice along the corridor and additional local travel opportunities
- Optimising the benefits of transport investment and the opportunity for travel behavior change arising from the proposed Sydney Metro City and Southwest project
- Developing an efficient transport system that is affordable and accommodates customer needs
- Encourage public and active transport for travel within and outside the corridor in keeping with the better connectivity and amenity in the urban environment
- Manage travel demand considering different reasons for travel to leverage existing and planned infrastructure
- 2.17 The strategies and initiatives identified in the Integrated Transport Strategy to achieve this are as follows:
  - Supporting urban renewal by providing a range of improved travel choices and reducing reliance on private vehicles
  - Providing connections for a permeable pedestrian network to support local movements and improving accessibility to town centres and public transport nodes. This would include infrastructure upgrades such as footpath improvements and new crossing points as well as the introduction of 40km/h speed limits and complementary design elements in high pedestrian activity areas
  - Providing a high quality cycleway network that connects to key employment destinations, including the implementation of a regional cycleway adjacent to the existing rail corridor between Bankstown and Sydenham

- Supporting the introduction of the proposed Sydney Metro City & Southwest by providing multi-modal transport access to station precincts
- Providing an improved, more connected bus network which supports the growth of the corridor including the introduction of new cross-regional bus services linking to the corridor to key destinations such as Sydney Olympic Park and Sydney Airport, and improving the quality of customer interchange especially at Bankstown, Campsie and Canterbury
- Retaining the functionality of the arterial road network for longer distance private vehicle and freight trips, including to support the introduction of WestConnex
- 2.18 Specific measures identified in the report include the following:
  - bus priority measures along existing Parramatta to Bankstown bus corridor, including Hume Highway, Chapel Road and Canterbury Road;
  - new bus service connecting Bankstown with Macquarie park via Sydney Olympic Park;
  - increased frequencies for bus routes feeding Sydney Metro City & Southwest stations, including routes 905, 907, 909 and 925 via Bankstown;
  - introduce a shared bicycle/pedestrian path along the existing rail corridor between Bankstown and Sydenham;
  - support councils within the Sydenham to Bankstown corridor in planning and delivering bicycle plans;

- include bicycle parking at Sydney Metro City & Southwest station precincts, and in new developments;
- include a requirement for a site travel plan to be prepared in new developments above a certain threshold;
- provide pedestrian-friendly design at metro stations, including wide footpaths and clear wayfinding;
- support councils within the Sydenham to Bankstown corridor in planning and delivering pedestrian access and mobility plans;
- provide bus priority measures and/or frequency enhancements on the bus route between Bankstown and Burwood;
- o introduce light rail between Parramatta and Bankstown;
- widen Stacey Street to three lanes in each direction between Macauley Avenue and Hume Highway (this project is currently under construction);
- o provide grade-separation at the Hume Highway/Stacey Street intersection;
- introduce Sydney Metro City & Southwest for high frequency rail services along the corridor;
- increase frequencies on the heavy rail line between Bankstown and Lidcombe to six per hour in peak periods and four per hour outside peak periods;

- reduce parking rates for commercial and industrial uses around public transport nodes;
- provide suitable treatments to reinforce the existing shared zones in Bankstown City Plaza;
- improve pedestrian accessibility between the southern end of the plaza and the railway station.
- 2.19 The planning proposal is consistent with the above infrastructure and transport measures to encourage and facilitate development within the corridor. The planning proposal therefore sits within the broader planning framework of the Sydenham to Bankstown Urban Renewal Corridor Strategy, Sydney Metro City and Southwest rail project and associated studies.
- 2.20 Council has prepared a Section 94A plan which includes measures to accommodate additional development in the area, including the Bankstown CBD.

### Bankstown Complete Streets

2.21 The draft Bankstown Complete Streets document (April 2019) has been prepared by council as a CBD transport and place plan. It has been prepared as a masterplan to guide street and transport upgrades in Bankstown CBD, to cater for the expected increase in employment, students and residents over the next 20 years.

- 2.22 It presents a masterplan and concept design for streets in the CBD, which includes changes to parking controls, intersections, pedestrian and cycle arrangements, bus arrangements and priorities.
- 2.23 The masterplan is largely confined to existing public places (streets and other council owned land such as parks). However, it also relies on a number of measures being implemented on privately owned land, including Bankstown Central.
- 2.24 A ring road is identified for the CBD, to reduce traffic volumes on other CBD streets. The ring road would include Macauley Avenue, Chapel Road, Brandon Avenue, Greenwood Avenue, Marion Street, Meredith Street, Rickard Road and Stacey Street. To a large extent, these roads already function to provide a ring road for the CBD. Modifications to other roads, as identified in the masterplan, would likely increase traffic flows on the ring road system, including Rickard Road.
- 2.25 The masterplan identifies an extension of Jacobs Street to connect to North Terrace through the Bankstown Central site. Jacobs Street, including the proposed extension, and North Terrace, west of the extension, would form part of the major bus route through the CBD.
- 2.26 In association with the changes to bus operations, and to improve connectivity within the CBD, a number of roads close to the site are proposed to be converted to two-way, including The Mall, The Appian Way, Fetherstone Street and North Terrace (west of The Appian Way).
- 2.27 A number of measures are proposed on streets adjacent to the shopping centre, including:

- traffic signal upgrades at Rickard Road/Jacobs Street, Rickard Road/Sir Joseph Banks Street (including potential car park access to the shopping centre), Rickard Road/Lady Cutler Avenue, Lady Cutler Avenue pedestrian crossing and Lady Cutler Avenue/North Terrace. The upgrades at these intersections include pedestrian crossings on all approaches and phase changes to support the ring road and bus movements;
- new traffic signals at Jacobs Street/The Mall, The Mall/The Appian Way and North Terrace/Jacobs Street. These are proposed in association with the proposed Jacobs Street extension, to cater for bus and pedestrian movements;
- a new shared pedestrian/cycle path on the southern side of Rickard Road, adjacent to the centre;
- o a new pedestrian bridge over the railway line at Lady Cutler Avenue;
- time-restricted parking (one hour) in North Terrace and Lady Cutler Avenue, adjacent to the centre, plus a drop-off zone in Lady Cutler Avenue; and
- removing the angle parking from the southern side of North Terrace and provide parallel parking on both sides.
- 2.28 A Traffic Modelling Assessment Report (prepared by GTA Consultants, 18 April 2019) was prepared in association with the complete streets masterplan. This report considers the following measures:

- upgrade to Stacey Street/Fairford Road;
- upgrade to Stacey Street/Greenacre Road;
- o a roundabout at and closure of McDonald Lane;
- Stacey Street widened to three lanes in each direction;
- upgrade to Stacey Street/Hume Highway;
- o opening Kitchener Parade/Rickard Road northern leg;
- The Appian Way made pedestrian only during peak hours and closure of Fetherstone Street to traffic;
- o relocated interchange to new bus only link;
- o closure of Olympic Parade from Marion Street;
- Bankstown City Plaza converted to pedestrian only link;
- traffic signals at Greenwood Avenue/Brandon Avenue and Stanley Street/McDonald Lane;
- changes to traffic signal phasing and cycle times;
- o clearways at Greenwood Avenue and Brandon Avenue; and
- removing parking on Chapel Road southbound approaching Rickard Road, to provide two right turn lanes.

### Public Transport

- 2.29 The shopping centre is adjacent to Bankstown Railway Station. Bankstown is on the Bankstown Line (Liverpool to City via Bankstown).
- 2.30 Services through Bankstown are every 15 minutes in each minutes in each direction. During weekday peak periods, services are more frequent.
- 2.31 Local bus services are provided by a number of operators. There are bus interchanges on the northern and southern sides of the railway line as well as an interchange at Centro Bankstown. Services include:

- o route 905: Bankstown to Villawood and Fairfield;
- o route 907: Bankstown to Parramatta;
- o route 908: Bankstown to Merrylands;
- o route 909: Bankstown to Parramatta;
- o route 911: Bankstown to Auburn;
- o route 913: Bankstown to Strathfield;
- o route 922: East Hills to Bankstown;
- o route 923: Panania to Bankstown;
- o route 924: East Hills to Bankstown;
- o route 925: East Hills to Lidcombe via Bankstown;
- o route 926: Revesby Heights to Bankstown;
- o route 939: Greenacre to Bankstown;
- o route 940: Hurstville to Bankstown;
- o route 941: Hurstville to Bankstown;
- o route 944: Hurstville to Bankstown;
- o route 945: Hurstville to Bankstown;
- o route 946: Hurstville to Bankstown;
- o route 962: Bankstown to Miranda and Cronulla;
- o route M90: Liverpool to Burwood;
- o route M91: Hurstville to Parramatta;
- o route M92: Sutherland to Parramatta;
- 2.32 Overall, the site has good access to regular public transport services. As noted earlier, the Sydney Metro City and Southwest rail project will upgrade rail services to Bankstown. It will include a new station, pedestrian links and interchange. The planning proposal includes integration with the new metro station, including pedestrian links.

### 3. TRANSPORT REVIEW FOR PLANNING PROPOSAL

- 3.1 The planning proposal would provide for mixed use development, including retail, commercial, hotel, residential, student accommodation, serviced apartments and child care, with a FSR of 3.5:1. The planning proposal also seeks to amend the height controls for the site.
- 3.2 The scale of development envisaged in the planning proposal would include some 18 buildings, largely around the perimeter of the site. The additional development would include some 110,000m<sup>2</sup> commercial, 1,800 rooms for student accommodation, 550 hotel rooms, 100 serviced apartments, 1,000 residential apartments and a child care centre. The existing retail uses on the site would reduce by some 7,000m<sup>2</sup>. The redevelopment would provide improved connections to and from Bankstown station.
- 3.3 Consistent with the planning for the new metro line and redevelopment of the Sydenham to Bankstown corridor, the proposed development will provide significant services, facilities and residential development in the CBD, close to other services and facilities, as well as existing and future public transport services. This means that traffic generation and the need to travel will be reduced. Employees and visitors will have the opportunity to use public transport when they travel.
- 3.4 This chapter reviews the implications of the planning proposal through the following sections:
  - public transport, walking and cycling;
  - □ site travel plan;

- □ parking provision;
- access, servicing and internal layout;
- □ traffic generation; and
- □ summary.

### Public Transport, Walking and Cycling

- 3.5 As previously discussed, the site is adjacent to Bankstown railway station and bus interchanges. Rail services operate on a 15 minute headway in each direction. Numerous bus services provide links to surrounding areas.
- 3.6 The future new metro line, interchange and pedestrian connections between the metro station and Bankstown CBD will improve the accessibility of the both the CBD and public transport services. The planning proposal provides an opportunity to better integrate the town centre with these public transport services. Appropriate bicycle parking will be included in the redeveloped centre.
- 3.7 The planning proposal would provide for increased employment, retail and residential densities in the CBD and adjacent to public transport services. The proposal would therefore be consistent with the planning for the renewal of the Sydenham to Bankstown corridor. It will also satisfy the broader planning objectives of:
  - (a) improving accessibility to housing, employment and services by walking, cycling, and public transport;
  - (b) improving the choice of transport and reducing dependence solely on cars for travel purposes;

- (c) moderating growth in the demand for travel and the distances travelled, especially by car; and
- (d) supporting the efficient and viable operation of public transport services.

### Site Travel Plan

- 3.8 To encourage travel modes other than private vehicle, it is proposed to adopt a travel demand management approach, through preparation of a site travel plan to meet the specific needs of the site, future employees, residents and visitors. The specific requirements and needs of the future employees and residents will be incorporated in the site travel plan to support the objectives of encouraging the use of public transport.
- 3.9 The principles of the site travel plan, to be developed in consultation with council,RMS, bus and rail operators and other stakeholders, will include the following:
  - encourage the use of public transport, including bus services to and through Bankstown at the existing and future new interchanges;
  - identify existing bus routes which stop adjacent and close to the site, including the location of bus stops and pedestrian crossings at signalised intersections;
  - o work with bus operators to improve services;
  - encourage public transport by employees and visitors through the provision of information, maps and timetables in the site travel plan;
- raise awareness of health benefits of walking and cycling (including maps showing walking and cycling routes, including through and adjacent to the site);
- encourage cycling by providing safe and secure bicycle parking, including the provision of lockers and rails for employees, residents and shoppers;
- provide appropriate on-site parking provision, consistent with appropriate council/RMS controls and the objective of reducing traffic generation.

#### Parking Provision

- 3.10 At future development application stages, appropriate parking will be provided for the various components of the development.
- 3.11 Part B5 of the Bankstown Development Control Plan 2015 does not include parking requirements for shopping centres. For shops with more than 4,000m<sup>2</sup> GFA, the DCP indicates that appropriate parking should be determined based on parking surveys.
- 3.12 RMS surveys of the parking demands of large shopping centres (greater than 80,000m<sup>2</sup>) have found peak demands in the range 3.5 to 3.6 spaces per 100m<sup>2</sup> GLA. By comparison, surveys of existing parking demands at the centre have found demands of 3.9 spaces per 100m<sup>2</sup>.
- 3.13 For the mixed use components, including commercial, student accommodation, hotel, serviced apartments and child care centre, reduced rates of parking should be provided, compared to conventional commercial development, taking into account the excellent existing and future public transport services.

- 3.14 DCP 2015 includes a parking requirement of one space per dwelling, plus one space per five dwellings for visitors, for residential flat buildings in the B4 zone.
- 3.15 By comparison, the RMS guidelines include the following parking rates for high density residential development:
  - $\circ$  0.4 0.6 spaces per one bedroom apartment;
  - 0.7 0.9 spaces per two bedroom apartment;
  - I.2 I.4 spaces per three bedroom apartment; and
  - one space per five to seven apartments for visitors.
- 3.16 In future development applications, appropriate parking will be provided, with reference to the above rates, and the site's location in the Bankstown CBD, adjacent to excellent existing and future public transport services.

#### Access, Servicing and Internal Layout

- 3.17 Access to the shopping centre and the new mixed use buildings would continue to be provided from Stacey Street, Rickard Road, North Terrace, Lady Cutler Avenue, Jacobs Street and The Mall. New access would be provided from The Appian Way. Internally, improved connections would be made between the retail car parks, so that vehicles can circulate on-site without exiting to the adjacent road network. The internal connections would link the retail parking areas on the site and would include connections between upper parking levels across Lady Cutler Avenue.
- 3.18 Pedestrian access would be provided from the above streets. The development would include provision for through site connections, to better connect to the station, surrounding areas and other services and facilities in the CBD.

- 3.19 Access to and from the car parks would be controlled. The details of the proposed access arrangements would be provided in future development applications.
- 3.20 Access to and from residential buildings would be provided from within the site, or from new locations on the external road network.
- 3.21 The majority of service vehicles would continue to access the site from North Terrace, to the basement level loading docks.
- 3.22 Parking and circulation areas will be designed, at the development application stages, in accordance with the Australian Standard for Parking Facilities (Part 1: Off-street car parking, Part 2: Off-street commercial vehicle facilities and Part 6: Off-street parking for people with disabilities), AS 2890.1:2004, AS 2890.2 2002 and AS 2890.6:2009.

#### Traffic Generation

- 3.23 Traffic generated by development envisaged in the planning proposal will have its greatest effects during weekday afternoon and Saturday peak periods when it combines with other traffic on the surrounding road network.
- 3.24 Being located within the CBD, and with reduced rates of parking, the commercial component would have a likely traffic generation of some 0.3 vehicles per hour per 100m<sup>2</sup> at peak times. This is comparable to other town centre and CBD locations.
- 3.25 Based on RMS surveys, the residential apartments would have a generation of some 0.15 vehicles per hour per apartment two-way at peak times.

- 3.26 The student accommodation, hotel and serviced apartments would have a lower traffic generation than the residential; some 0.1 vehicles per hour. The child care centre would have a generation of some 0.7 vehicles per hour per place, based on RMS surveys.
- 3.27 The retail development on the site would reduce by some 7,000m<sup>2</sup>. The retail uses have a traffic generation of some four vehicles per hour per 100m<sup>2</sup> at peak times.
- 3.28 Taking into account the reduced retail development, the scale of development envisaged in the planning proposal would result in an increase of some 500 vehicles per hour two-way at peak times. Spread between multiple access points, across a number of street frontages, its effects in any location would be modest.
- 3.29 In association with other measures identified in the Bankstown CBD Complete Streets masterplan, consideration could also be given to the following measures, to improve the operation of CBD intersections:
  - providing additional capacity on the northern leg of the Jacobs Street/Rickard
     Road intersection by marking two lanes for a greater approach distance;
  - providing additional capacity at the Stacey Street/Wattle Street intersection at the shopping centre exit; and
  - lengthening the left turn lane into Rickard Road for northbound traffic on Stacey Street.

- 3.30 As previously noted, the widening of Stacey Street to six lanes is currently occurring. This will improve the capacity of the Stacey Street intersections.
- 3.31 Council's Section 94A plan includes the following works:
  - streetscape works within The Mall, The Appian Way, Chapel Road, North Terrace, South Terrace and Rickard Road;
  - new footpath construction along Jacobs Street;
  - cycle facilities and footpath/cycleway connections into and around Bankstown CBD;
  - o upgrade pedestrian facilities near Chapel Street and The Mall;
  - o upgrade crossings/intersections at Railway Station precinct;
  - o upgrade pedestrian crossing at North Terrace near The Appian Way;
  - o upgrade traffic management and facilities at The Appian Way;
  - o upgrade pedestrian access and facilities at Jacobs Street and The Mall;
  - upgrade pedestrian facilities at the intersection of Lady Cutler Avenue and North Terrace; and
  - upgrade traffic management at the intersection of The Mall and The Appian Way.

3.32 At the appropriate stage in the planning process, the development will make appropriate contributions towards these works under the Section 94A plan.

#### Summary

- 3.33 In summary, the main points relating to the transport implications of the planning proposal are as follows:
  - the planning proposal is for a FSR of 3.5:1 and amended height controls, to accommodate a mixed use development including retail, commercial, hotel, residential, student accommodation, serviced apartments and child care;
  - ii) the planning proposal is consistent with planning for Bankstown under the Sydenham to Bankstown Urban Renewal Corridor Strategy and the Sydney Metro City and Southwest rail project;
  - iii) the planning proposal provides for improved connections to and greater integration with the new Bankstown Metro station;
  - iv) the Complete Streets masterplan has been prepared by council to guide street and transport upgrades in Bankstown CBD, to cater for the expected increase in employment, students and residents over the next 20 years;
  - v) a series of transport and infrastructure works has been identified in these planning studies to accommodate and facilitate development within the Sydenham to Bankstown corridor and CBD;
  - vi) a site travel plan will be prepared for the development;

- vii) appropriate parking will be provided as part of future development applications, consistent with the site's location in the Bankstown CBD and the objective of reducing traffic generation;
- viii) access, servicing and layout arrangements will be provided in accordance with AS 2890.1:2004 and AS 2890.2 2002 as part of future development applications;
- ix) the scale of development envisaged in the planning proposal would result in relatively modest traffic increases on the surrounding road network, with modest traffic effects;
- x) to improve the capacity of CBD intersections consideration could be given to:
  - providing additional capacity on the northern leg of the Jacobs Street/Rickard Road intersection;
  - providing additional capacity at the shopping centre exit at the Stacey Street/Wattle Street intersection; and
  - lengthening the left turn lane into Rickard Road for northbound traffic on Stacey Street;
- xi) council's section 94A plan also includes a series of improvements to accommodate development in the town centre; and
- xii) at the appropriate stage in the planning process, the development will make appropriate contributions under the Section 94A plan.



### Location Plan



# Aeronautical Impact Assessment

# Planning Proposal Bankstown Central NSW.

Vicinity Centres

LB00356

Final V1 20 December 2019



Landrum & Brown Worldwide (Aust) Pty Ltd, 2019 All Rights Reserved.

The information contained in this document is confidential and proprietary to Landrum & Brown Worldwide (Aust) Pty. Ltd. Other than for evaluation and governmental disclosure purposes, no part of this document may be reproduced, transmitted, stored in a retrieval system, or translated into any language in any form by any means without the written permission of Landrum & Brown.

Version No.	Basis of issue	Author	Date
001	Draft report for submission to Client	PWW	7 November 2019
Final V1 Final report following client comments		PWW	20 December 2019



### Contents

1	Introduction4				
	1.1 The Development	4			
2	Prescribed Airspace				
	2.1 Overview	5			
	2.2 PANS OPS Surfaces	6			
	<ul> <li>2.2.1 Bankstown Airport</li> <li>2.2.2 Sydney Airport</li> <li>2.3 Obstacle Limitation Surfaces</li> </ul>	6			
	<ul> <li>2.3.1 Bankstown Airport</li> <li>2.3.2 Sydney Airport</li> <li>2.4 Aeronautical Study and Safety Case for OLS Infringement</li> </ul>	7			
	<ul> <li>2.4.1 Infringement of the Inner Horizontal Surface – ICAO Document References</li></ul>	9 10			
3	ATC Surveillance System Performance	11			
4	Navigation Aid Performance	11			
5	5 Roof Top Exhaust Plumes11				
6	6 Cranes				
7	7 Conclusion12				
Appendix A – Building Height and Site Layout Diagrams13					
Ap	Appendix B – Assessment Methodology15				
A	Appendix C – Glossary of Aeronautical Terms and Abbreviations16				



# 1 Introduction

#### 1.1 The Development

Vicinity Centres has tasked Landrum & Brown Worldwide (Australia) Pty Ltd to prepare an Aeronautical Impact Assessment (AIA) to support a Planning Proposal for the Bankstown Central redevelopment project in Bankstown's CBD.

The redevelopment of the site comprises several buildings up to a maximum height of 107.08 m AHD and is located just to the north of Bankstown Railway Station. The site is bounded by North Terrace, Stacey Street, Rickard Road, Jacobs Street and The Appian Way in Bankstown.



Figure 1: Site Location (Source: Vicinity Centres)



Figure 2: Proposed development location in relation to Bankstown Airport and Sydney Airport (Google Earth)



This report considers the likely impact of the redevelopment upon aviation activities in the area, especially Bankstown Airport and outlines the steps necessary to gain approval from The Department of Infrastructure, Transport, Regional Development and Cities for any infringement of Prescribed Airspace at airports in the vicinity of the site.

### 2 Prescribed Airspace

#### 2.1 Overview

The Airports (Protection of Airspace Regulations) 1996 specifies volumes of Prescribed Airspace related to Federally leased airports such as Sydney Airport and Bankstown Airport that protect them from uncontrolled obstacle growth that may have an adverse impact upon flight safety or the regularity of flight operations at those airports.

Prescribed Airspace for an airport is the airspace above any facet of the Obstacle Limitation Surfaces (OLS) or the PANS OPS (Procedures for Air Navigation Services – Aircraft Operations) surfaces for an airport, or the Radar Terrain Clearance Chart (RTCC) protection surfaces.

The OLS are conceptual surfaces associated with runways that are designed to protect aircraft operations from unrestricted obstacle growth.

The OLS comprises:

- outer horizontal surface (OHS);
- conical surface;
- inner horizontal surface (IHS);
- approach surface for each runway;
- inner approach surface for each runway;
- transitional surface for each runway;
- inner transitional surface;
- baulked landing surface; and
- take-off climb surface.

The outer segments of the OLS for airports with Type B, 3D instrument approaches, such as Sydney Airport, extend to 15 km from the airport's Aerodrome Reference Point (ARP). Airports such as Bankstown have OLS extending to 4 km from the ARP, however Bankstown has designated an OHS for future Master Planning purposes. The future surfaces must be considered.

The PANS OPS surfaces are designed beneath instrument approach and departure flight paths with a prescribed minimum obstacle clearance above the obstacles or terrain. They provide an obstacle free flight path to enable safe and efficient aircraft operations in Instrument Meteorological Conditions (IMC) during which flight crews cannot necessarily see the ground or obstacles and they must rely upon aircraft instrumentation to determine their position in relation to navigation aids and runways.

The RTCC provides Air Traffic Control (ATC) with a minimum safe altitude above terrain and obstacles, above which they can provide surveillance services to aircraft in the area around major airports. A protection surface below the useable heights restricts obstacle growth.

Infringement by a building or crane into Prescribed Airspace requires the approval of the aerodrome operator, the Civil Aviation Safety Authority (CASA), and the Department of Infrastructure, Transport, Regional Development and Cities (DITRDC) where the airport is on federally leased land.

Permanent infringement of PANS OPS or RTCC protection surfaces are not supported by the aviation authorities, however, temporary "controlled activities" up to a duration of 3 months may be able to be approved subject to support from the airport, Airservices Australia and CASA being provided to DITRDC. If the infringement is shown to impact on aviation safety or regularity of aircraft operations, it is unlikely to be approved.



#### 2.2 PANS OPS Surfaces

Bankstown and Sydney Airports' PANS OPS surfaces were assessed in detail for this proposed redevelopment.

Other airports including RAAF Richmond and Camden Airport have PANS OPS surfaces related to a 25 nm Minimum Safe Altitude (MSA) over the redevelopment site but they are in excess of 300 m AHD so are not relevant to the content of this report.

Western Sydney Airport, which is not planned to be operational until approximately 2027 will also have 25 nm MSA PANS OPS surfaces over the redevelopment site that will be higher than 300 m AHD.

#### 2.2.1 Bankstown Airport

The detailed assessment of Bankstown Airport's PANS OPS surfaces showed that the lowest PANS OPS surface above the building site is related to the IFR Circling Area for Category A/B aircraft, with a PANS OPS surface of 108.2 m AHD.

The proposed building at a maximum height of 107.08 m AHD will not infringe the PANS OPS surfaces at Bankstown Airport.

In order to improve the likelihood of gaining aviation authority approval for the redevelopment, a concise management plan for the construction cranes will be required prior to submittal of an application to Bankstown Airport. Any crane activity above 108.2 m should be limited to a maximum duration of 3 months.

#### 2.2.2 Sydney Airport

A detailed assessment of Sydney Airport's PANS OPS surfaces showed that the lowest PANS OPS surface above the building site is related to the 25 nm MSA with a minimum altitude of 340 m AHD.

The proposed building at a maximum height of 107.08 m AHD will not infringe the PANS OPS surfaces at Sydney Airport.

#### 2.3 Obstacle Limitation Surfaces

Obstacle limitation surfaces extend to a maximum distance of 15 km from the Aerodrome Reference Point (ARP) of relevant airports.

The redevelopment site is located within Sydney Airport's OLS and Bankstown Airport's OLS.

#### 2.3.1 Bankstown Airport

The redevelopment site is located within the Inner Horizontal Surface (IHS) and the Conical Surface of the Bankstown Airport OLS.

The IHS is at a height of 51 m AHD.

The Conical Surface rises from 51 m at the edge of the IHS to 72 m at the intersection of Rickard Rd and Stacy St as shown on Figure 4.

The proposed building at a maximum height of 107.08 m AHD

- will infringe the OLS Inner Horizontal Surface; and
- will infringe the OLS Conical Surface.

An application to Bankstown Airport must be made in order to gain approval from DITRDC for this building project.







Figure 4: Development Location in relation to Bankstown and Sydney Airport OLS

#### 2.3.2 Sydney Airport

The development site is located within the Outer Horizontal Surface (OHS) of the Sydney Airport OLS. The Sydney Airport OHS is at a height of 156 m AHD.



The proposed building at a maximum height of 107.8 m AHD will not infringe the OLS Outer Horizontal Surface.



Figure 5: Development Location in relation to Sydney Airport OLS and Regional Development on 20 March 2015

#### 2.4 Aeronautical Study and Safety Case for OLS Infringement

As part of this assessment, an aeronautical study has been conducted to demonstrate that the proposed building to a maximum height of 107.08 m AHD would not adversely affect safety or significantly affect the regularity of operations of aircraft as per ICAO Annex 14, Aerodrome Design and Operations requirements.

As noted above, the proposed building will infringe the Bankstown Airport IHS of 51 m AHD by 56.08 The purpose of the IHS, as described in ICAO standards, is to restrict obstacle growth in the vicinity of airports and to protect the obstacle clearance of aircraft circling the airport in less than visual flight conditions prior to landing.

When the OLS surfaces were initially established, instrument approaches were generally only provided to one runway at the relevant airport and aircraft were not equipped for straight-in approaches with vertical guidance other than via the Instrument Landing System (ILS). A circling approach to a runway other than to the runway to which an instrument approach was designed was usually conducted when local weather conditions, such as wind velocity or visibility, made a landing on the instrument approach runway unsuitable.

A study by the Flight Safety Foundation<sup>1</sup> Approach-and-Landing-Accident Reduction (ALAR) Taskforce found that circling approaches were a major causation factor in a majority of aircraft accidents in the vicinity of airports. The ICAO Assembly Resolution A33-16 Global Aviation Safety Plan (GASP) recognised the need to prevent Controlled Flight Into Terrain (CFIT) accidents by implementing a worldwide program whereby National Aviation Authorities provided a straight-in instrument approach with vertical guidance to each runway used by airline aircraft. In Australia, this program is almost complete with the introduction of Baro-VNAV approaches at all certified and registered airports at which regular passenger transport aircraft operate.

<sup>&</sup>lt;sup>1</sup> Flight Safety Foundation ALAR Briefing Note 5.1



The promulgation of straight-in instrument approaches has reduced the requirement to restrict obstacle growth in areas where aircraft now do not operate due to the reduction in the frequency of circling approaches. ICAO has acknowledged the limitations imposed by the current OLS layout and has formed the OLS TASK FORCE<sup>2</sup> to review, update and align the OLS surfaces with the PANS OPS surfaces. In completing this work, ICAO recognises the economic balance required between terrestrial infrastructure requirements of growing cities and efficiency and safety of flight operations.

At Bankstown Airport, only Runway 11C is provided with a straight-in approach with vertical guidance, so in a strong north wind IFR aircraft arriving in IMC would need to conduct a circling approach to Runway 29C.

Aircraft conducting an IFR Circling approach are limited to the following minimum altitudes in the vicinity of the proposed Bankstown Central development site. See section 2.4.2 for a detailed assessment that shows that the IFR Circling areas are not infringed.

- CAT A/B 650 ft PANS OPS surface height 355 ft/**108.2 m** AHD
- CAT C 840 ft PANS OPS surface height 446 ft/135.9 m AHD.

With the building height and crane activity proposed at a maximum elevation of 107.08 m AHD, the IFR Circling areas are not infringed.

#### 2.4.1 Infringement of the Inner Horizontal Surface – ICAO Document References

ICAO Airport Services Manual Part 6 - Control of Obstacles states in Para 1.2.2.4:

In assessing the operational effect of proposed new construction, tall structures would not be of immediate significance if they are proposed to be located in:

a) An area already substantially obstructed by terrain or existing structures of equivalent height.

b) An area which would be safely avoided by prescribed procedures associated with navigational guidance where appropriate.

The IHS can be infringed in accordance with the recommendations of ICAO Doc Annex 14 Volume 1, Aerodrome Design and Operations, Para 4.2.20, which states:

New objects or extensions of existing objects should not be permitted above the Conical Surface and the Inner Horizontal Surface except when, in the opinion of the appropriate authority, an object would be shielded by an existing immovable object, or after an aeronautical study it is determined that the object would not adversely affect safety or significantly affect the regularity of operations of aeroplanes.

#### 2.4.2 Examination of Circling Approaches

The proposed building development, at the maximum height of 107.08 m AHD, was examined to confirm that there would be no changes required to the published circling minimum altitudes.

The development site is located underneath the CAT A/B and CAT C IFR circling areas for Bankstown Airport.

The aircraft category (CAT) depends on aircraft performance parameters and is published in the ICAO PANS OPS document.

The Minimum Descent Altitudes (MDA) published for circling approaches at Bankstown Airport, when an accurate QNH is available are:

- CAT A and B aircraft: 650 feet (198.1 m) AMSL, and
- CAT C aircraft: 840 feet (256 metres) AMSL.

The circling area limits from the runway thresholds, and Minimum Obstacle Clearance (MOC) for circling approaches are published in the PANS OPS document, as follows:

<sup>&</sup>lt;sup>2</sup> https://www.icao.int/SAM/Documents/2016-

SUPLIM/RPEAGA7\_NI\_04\_Apéndice%20B\_Obstacle%20Surfaces-%20the%20Concept-%20draft-%20OLSTF-5%20Final%20with%20comments.pdf



- CAT A and B: Area radius 4.9 kilometres, MOC 295 feet (90 metres), and
- CAT C: Area radius 7.85 kilometres, MOC 394 feet (120 metres).

The MOC is the prescribed margin above obstacles or terrain in the PANS OPS segment of an instrument approach procedure that determines the Minimum Descent Altitude (MDA) for the procedure.

Note: The Aeronautical Information Publication (AIP) publishes all distances in nautical miles, and altitudes in feet for instrument flight procedures. Displays to pilots are in the same format. The MDA box is shaded which allows pilots to reduce the shown MDA by 100ft if they are in receipt of an accurate QNH, this usually occurs when ATC are on duty.

**Table 2** depicts the applicable circling area protection surface height and the clearance (in green) or infringement (in red) of the building on each surface.

Aircraft Category (CAT)	Height of PANS OPS Surface	Result for building height of 107.08 m AHD
A and B	108.2 m	11 m Clearance
С	135.9 m	28.8 m Clearance

Table 1: Circling Area PANS OPS heights

#### 2.4.3 Aeronautical Study Conclusion

The proposed development would be unlikely to have a significant impact upon flight operations at Bankstown Airport as its maximum height does not infringe the IFR Circling Area MDA.

This aeronautical study will need to be included in any application to the aviation authorities for approval of the activity.

#### 2.5 Radar Terrain Clearance Chart

The protection surface height for the RTCC above the development site is 152 m AHD.

At a maximum height of 108.08 m the proposed building will not infringe the RTCC protection surface.



Figure 6: Sydney RTCC (SACL Airspace Protection web site)



# 3 ATC Surveillance System Performance

ATC rely on surveillance systems to safely and efficiently control aircraft operations in the vicinity of Sydney Airport and the other airports in the Sydney Basin.

Buildings and/or terrain that infringe radar clearance planes have the potential to cause signal shadows in areas where ATC need to provide a surveillance service or advisory service to aircraft.

This assessment identified two radars in relative proximity to the development site: the Sydney Airport Terminal Area Radar (TAR), and the Cecil Park TAR.

The presence of multiple surveillance systems that support each other will reduce the potential of shadow effects.

The proposed development, at a height of 107.08 m AHD, will not infringe the Sydney Airport TAR clearance plane or the Cecil Park TAR clearance plane.

Construction cranes are not considered to have an impact on the performance of ATC surveillance equipment.

Airservices Australia will assess any likely impact that the proposed development may have on the Sydney Airport TAR, or other surveillance systems such as ADS-B, along with any mitigating effect of the other installations.

Surveillance System	Distance from development	Antenna Elevation (AHD)	Clearance Plane Elevation at development site Distance x Tan 0.5° + TAR elevation	Result for development height of 107.08 m AHD
Sydney Airport TAR	13700 m	38.2 m	157.8 m	50.72 m Clearance
Cecil Park TAR	19090 m	200.5 m	367.1 m	260.02 m Clearance

Table 2: Impact of development on ATC Surveillance System Performance

### 4 Navigation Aid Performance

There are navigation aids installed at Bankstown Airport and Sydney Airport, including ILS, GBAS, NDB and DME.

The Building Restricted Areas (BRA) describes a sensitive zone that exists to a radius of 3000 m from the navigation aid antenna sites. The building development limitations within the BRA is specified in the Airservices Australia document Navigation Aid Building Restricted Areas and Siting Guidance AEI-7.1613 Issue 2.

The development site is located more than 3 km from any navigation aid and is therefore outside of all BRA for all navigation aids in the Sydney area and therefore should not have an impact upon their operation.

## 5 Roof Top Exhaust Plumes

Exhaust plumes in excess of 4.3 m/s which exist in either OLS or PANS OPS surfaces can create sufficient turbulence to upset the stability of aircraft during take-off and landing operations.

Part 139 of the Civil Aviation Safety Regulations 1988 (CASR 1988) provides that CASA may determine that a gaseous efflux having a velocity in excess of 4.3 m/s is, or will be, a hazard to aircraft operations because of the velocity of the efflux.

Should any roof top exhaust plume rise in excess of 4.3 m/s infringe any of the above mentioned OLS or PANS OPS surfaces, they must be referred to CASA for their assessment of risk to aircraft operations.



### 6 Cranes

Should any construction cranes be required above the lowest PANS OPS height of 108.2 m AHD and therefore infringe any Prescribed Airspace, an application to Bankstown Airport will need to be made.

Cranes that infringe Prescribed Airspace may only be able to be approved up to a maximum duration of 3 months if in the opinion of the aviation authorities, safety standards are not affected.

## 7 Conclusion

The Bankstown Central planning redevelopment proposal, with a building to a maximum height of 107.08 m AHD:

- will infringe the Inner Horizontal Surface of the OLS for Bankstown Airport;
- will not infringe the PANS OPS surfaces for Bankstown Airport;
- will not infringe Sydney Airport's OLS or PANS OPS surfaces;
- will not infringe the PANS OPS surfaces for any other airport in the vicinity;
- will not infringe any BRA for navigation aids at Sydney Airport;
- will not infringe the Sydney TAR or the Cecil Park TAR clearance plane; and
- will not infringe the RTCC protection surface above the site.

Based on the information provided throughout this report, the infringements to the Bankstown Airport OLS is unlikely to be considered to adversely affect aviation safety or regularity of flight operations and approval for the building is likely to be achieved.

It will be necessary to gain approval for the infringement of the Bankstown OLS via an application to Bankstown Airport.



## Appendix A – Building Height and Site Layout Diagrams



North- South Section Elevation Source: Vicinity Centre/ FJMT Studio