

North - west view



+

South - west view



4



South - west view



South - east view



+







Potential Future Buildings

Commercial Core Intensification

Proposal

Mixed Use Intensification

Residential Transition Area

Residential Intensification

Transitional Area

Community Hub

City Fringe

Historic Core

The Site in the context of surrounding existing development



### 10 Proposal Urban Character

The Site is united in three parts around the north-south alignment of Eat Street and The Grove. It is one site but the disposition of activity upon it is varied.

#### **Eat Street and The Grove**

Eat Street will have the character of a vibrant place for pedestrians with cafes and outdoor seating. In contrast to it, The Grove will have the character of quiet repose for residents and visitors in a garden setting.

Residential buildings are proposed with ground floor retail frontages onto Eat Street and The Grove. We anticipate that a retail tenancy will open east and west to both Eat Street and The Grove. The architectural design of buildings that look both ways to The Grove and to Eat Street should be a sophisticated blend of the character of the two frontages.

#### **Union Square**

Like the buildings between The Grove and Eat Street, Union Square is proposed to moderate between the distinct retail vibrancy on Eat Street and the gardenesque repose of The Grove. As the buildings will architecturally blend these two distinct characters, Union Square will be designed as a landscape blend of Eat Street vibrancy and The Grove gardenesque repose.

#### **Communal Open Space and Union Lane**

Union Square extends west to a large communal open space traversed by paths with seating, lighting, lawn and garden. An investigation of the micro-climate within the Communal Open Space should avail of its most pleasant aspects for the use of residents. It should also be available to the public. Our goal for the Communal Open Space is to provide a semi-enclosed space overlooked by residences. It should provide a place of tranquillity where people are not subject to unpleasant sensory experiences such as noise, glare, sun, wind and cold.

The buildings that surround the western open space range in height between four and twenty-five storeys. They are arranged to provide good solar access from the north into the communal open space.

East of Union Square we propose a second communal open space as a counterpart of the western communal open space. It has buildings of similar size, between 4 and 25 storeys. However its area is approximately half of the western open space. It adds width to the existing (narrow) Union Lane. Buildings are proposed to provide good solar access into the eastern communal open space.

#### Buildings

The architectural character of buildings should be similar to convey a wholeness to the site, but varied as they adopt the distinct character of their different settings. Along High Street we propose five residential towers that vary at 25, 14, 20, 20 and 18 storeys. All are generally aligned North-South. They are paired in the East and West – which should be explored architecturally as having similar but different aesthetic characteristics.

The character of the central 20-storey tower that stands alone between The Grove and Eat Street is discussed above as having a dual frontage. Its architectural character should be explored as representing that duality. The central buildings are paired north-south as 20- and 16-storey buildings separated by Union Square. These buildings should develop related but distinctly different architectural character.

#### Streets

The arterial roads Mulga Road and High Street meet in a large intersection north-west of the site. We propose to match the prominence of the intersection with a 25-storey iconic tower in the north-west of the site. The Mulga Road and High Street frontages will have large-format retail tenancies. We propose a landscape margin inside the property boundary to moderate between the edge of road and the retail interior.

Eat Street is proposed as a slow street with kerb-side parking that moderates between moving lanes and alfresco seating. Street trees should be designed to further enhance the pedestrian character.

Union Lane exists as a narrow lane that will benefit from the appearance of widening created by communal open space to the north.



Example of the potential development of Eat Street



Example of the potential development of The Grove

# 11 Site Section - Eat Street and The Grove





**Proposal Section along Union Lane** 

## 11 Site Section - Eat Street and The Grove





Potential development of Eat Street

# 11 Site Section - Eat Street and The Grove





# 12 Shadow Analysis

High Street Penrith - Winter Solstice





Note: The illustrated shadows are generated by the building's envelopes, 25% larger than the final building

LEGEND

- Site Boundary
- Shadows of Envelopes
- ----- Shadow of Proposed Envelopes beyond Site Boundary



Note: The illustrated shadows are generated by the building's envelopes, 25% larger than the final building

JBA High Street Penrith Urban Design Report 27

beyond Site Boundary



Note: The illustrated shadows are generated by the building's envelopes, 25% larger than the final building

LEGEND

- Site Boundary
- Shadows of Envelopes
- ----- Shadow of Proposed Envelopes beyond Site Boundary

# 13 Shadow Analysis on Future Use

High Street Penrith - Winter Solstice



11:00AM - Winter Solstice (21st June)







11:30AM - Winter Solstice (21st June)



Note: The illustrated shadows are generated by the building's envelopes, 25% larger than the final building

10:00AM - Winter Solstice (21st June)



12:00PM - Winter Solstice (21st June)



10:30AM - Winter Solstice (21st June)





### High Street Penrith - Winter Solstice



1:00PM - Winter Solstice (21st June)



2:30PM - Winter Solstice (21st June)



Note: The illustrated shadows are generated by the building's envelopes, 25% larger than the final building

1:30PM - Winter Solstice (21st June)



3:00PM - Winter Solstice (21st June)





# 14 Yield Spreadsheet

Site A		Envelope				Quantit
Sile A	Level	loor Area (m2)	Use	CEA (m2)	NI ( (m2)	of Unit
Podium	GF	4,872	Commercial	<b>GFA (m2)</b> 4,384.80	NLA (m2)	01 Unit
A1, A2, A3	1	4,872	Commercial	4,384.80		
~1, ~2, ~3		4,072	commercial	8,770		
A1. Tower	2	795	Residential	596	537	•
	3	795	Residential	596	537	
	4	795	Residential	596	537	
		795 795	Residential Residential	596	537 537	
	6 7			596		
		795	Residential	596	537	
	8	795	Residential	596	537	
	9	795	Residential	596	537	
	10	795	Residential	596	537	
	11	795	Residential	596	537	
	12	795	Residential	596	537	
	13	795	Residential	596	537	
	14	795	Residential	596	537	
	15	795	Residential	596	537	
	16	795	Residential	596	537	
	17	795	Residential	596	537	
	18	795	Residential	596	537	
	19	795	Residential	596	537	12
				10,733	9,659	12
A2. Tower	2	1076	Residential	807	726	
	3	1076	Residential	807	726	
	4	1076	Residential	807	726	
	5	1076	Residential	807	726	
	6	1076	Residential	807	726	
	7	1076	Residential	807	726	
	8	1076	Residential	807	726	
	9	1076	Residential	807	726	
	10	1076	Residential	807	726	
	11	1076	Residential	807	726	
	12	1076	Residential	807	726	
	13	1076	Residential	807	726	
	14	1076	Residential	807	726	
			Residential	807	726	
	15	1076	Residential	007		
	15 16	1076 1076	Residential	807	726	
	16	1076	Residential	807	726	
A3. Fdøe	16 17	1076 1076	Residential Residential	807 807 <b>12,912</b>	726 726 <b>11,621</b>	14
A3. Edge	16 17 2	1076 1076 717	Residential Residential Residential	807 807 <b>12,912</b> 538	726 726 <b>11,621</b> 484	14
A3. Edge	16 17	1076 1076	Residential Residential	807 807 <b>12,912</b>	726 726 <b>11,621</b>	14
A3. Edge	16 17 2	1076 1076 717	Residential Residential Residential	807 807 <b>12,912</b> 538 538	726 726 11,621 484 484	14
A3. Edge Residential Total	16 17 2	1076 1076 717	Residential Residential Residential	807 807 <b>12,912</b> 538 538	726 726 11,621 484 484	14

				Parking	Parking
	Туре	% Mix	Qty	Rate	Spaces
Site A Apartments & Parking	1 Bed	10	28	1	28
	2 Bed	80	221	1	221
	3 Bed	10	29	2	58
	Total resider	nts parking			307
	Visi	tor Parking		1 per 6 apt	46
	Commerc	cial Parking		1 per 50m2 GFA	175
					528
					Required
			Available		m2
	m2	Levels	m2	Car Spaces	38m2/car

4,863

4.00

parking deck - below ground

### **High Street Penrith Yield Testing**

19,452 **19,452** 

528 20,082

Development Assumptions	
Commercial Efficiency	90%
Residential Efficiency	
Envelope to GFA	75%
GFA to NLA	90%
apartment type	apt size (m2)
1br	60
2br	80



Site P		Envelope loor Area				Ourortit
Site B	F Level	loor Area (m2)	Use	GFA (m2)	NLA (m2)	Quantity of Units
Podium	GF (B1)	(m2) 714	retail/comm	GFA (m2) 643	NLA (MZ)	of units
Podium	GF (B1) GF	3386	showroom	3,047		
	GF (B2)	863	retail/comm	3,047		
	1 (B2)	863	retail/comm	777		
	1 (B2) 1 (B2)	714	retail/comm	643		
	1 (B2)	3386	showroom	3,047		
	1 (b)	5560	silowroom	8,933		
Residential Sleeve to Grove	GF	412	residential	309	278	3
	1	412	residential	309	278	3
B1 - Tower	2	602	residential	452	406	5
	3	602	residential	452	406	5
	4	602	residential	452	406	5
	5	602	residential	452	406	5
	6	602	residential	452	406	5
	7	602	residential	452	406	5
	8	602	residential	452	406	5
	9	602	residential	452	406	5
	10	602	residential	452	406	5
	11	602	residential	452	406	5
	12	602	residential	452	406	5
	13	602	residential	452	406	5
	14	602	residential	452	406	5
	15	602	residential	452	406	5
	16	602	residential	452	406	5
	17	602	residential	452	406	5
	18	602	residential	452	406	5
	19	602	residential	452	406	5
				8,745	7,871	98
B2		725			400	
DZ	2	735 735	residential residential	551 551	496 496	6
	3	460	residential	345	496 311	6
	5	460	residential	345	311	
	6	460	residential	345	311	4
	7	460	residential	345	311	4
	8	460	residential	345	311	4
	9	460	residential	345	311	4
	10	460	residential	345	311	4
	10	460	residential	345	311	4
		460	residential	345	311	4
	10			345	311	4
	12			245	211	
	13	460	residential	345	311	4
				345 345 345	311 311 311	4 4 4

C'1 D		Envelope				
Site B		loor Area				Quantit
	Level	(m2)	Use	GFA (m2)	NLA (m2)	of Unit
B3 - Tower	2	596	residential	447	402	
	3	596	residential	447	402	
	4	596	residential	447	402	
	5	596	residential	447	402	
	6	596	residential	447	402	
	7	596	residential	447	402	
	8	596	residential	447	402	
	9	596	residential	447	402	
	10	596	residential	447	402	
	11	596	residential	447	402	
	12	596	residential	447	402	
	13	596	residential	447	402	
				5,364	4,828	6
B4 - Tower	2	682	Residential	512	460	
	3	682	Residential	512	460	
	4	682	Residential	512	460	
	5	682	Residential	512	460	
				2,046	1,841	2
B5 - Tower	3	394	Residential	296	266	
	4	394	Residential	296	266	
			Residential	591	532	
B6 - Tower	3	795	Residential	596	537	
bo - rower	4	795	Residential	596	537	
	5	795	Residential	596	537	
	6	795	Residential	596	537	
	7	795	Residential	596	537	
	8	795	Residential	596	537	
	9	795	Residential	596	537	
	10	795	Residential	596	537	
	10	795	Residential	596	537	
	12	795	Residential	596	537	
	13	795	Residential	596	537	
	14	795	Residential	596	537	
	15	795	Residential	596	537	
	16	795	Residential	596	537	
	10	795	Residential	596	537	
	18	795	Residential	596	537	
	19	795	Residential	596	537	
	20	795	Residential	596	537	
	20	, , , , ,		10,733	9,659	12
37 - Tower	3	460	Residential	345	311	
by - iowei	4	460	Residential	345	311	
	5	460	Residential	345	311	

		Envelope					
Site B	Floor Area					Quantity	
	Level	(m2)	Use	GFA (m2)	NLA (m2)	of Units	
B8 - Tower	3	756	Residential	567	510	6	
	4	756	Residential	567	510	6	
	5	756	Residential	567	510	6	
	6	756	Residential	567	510	6	
	7	756	Residential	567	510	6	
	8	756	Residential	567	510	6	
	9	756	Residential	567	510	6	
	10	756	Residential	567	510	6	
	11	756	Residential	567	510	6	
	12	756	Residential	567	510	6	
	13	756	Residential	567	510	6	
	14	756	Residential	567	510	6	
	15	756	Residential	567	510	6	
	16	756	Residential	567	510	6	
	17	756	Residential	567	510	6	
	18	756	Residential	567	510	6	
	19	756	Residential	567	510	6	
	20	756	Residential	567	510	6	
	21	756	Residential	567	510	6	
	22	756	Residential	567	510	6	
	23	756	Residential	567	510	6	
	24	756	Residential	567	510	6	
	25	756	Residential	567	510	6	
				13,041	11,730	147	
B9 - Edge	2	404	Residential	303	273	3	
-	3	404	Residential	303	273	3	
				606	545	6	
Residential Total Site B				47,403	42,656	532	
Commercial Total Site B				8,933			
				56,336			

				Parking	Parking
	Туре	% Mix	Qty	Rate	Spaces
Site B Apartments & Parking	1 Bed	10%	53	1	53
	2 Bed	80%	426	1	426
	3 Bed	10%	53	2	106
	Total reside	ents parking			586
	Vis	itor Parking		1 per 6 apt	89
	Commer	cial Parking		1 per 50m2 GFA	179
					853
					Required
			Available		m2
	m2	Levels	m2	Car Spaces	38m2/car
Parking Site B					
parking deck - above ground	2,720	2.00	5,440		
parking deck - underground	6,537	4.35	28,436		
			33,876	853	32,415

### High Street Penrith Yield Testing

Development Assumptions	
Commercial Efficiency	90%
Residential Efficiency	
Envelope to GFA	75%
GFA to NLA	90%
apartment type	apt size (m2)
1br	60
2br	80
3br	100



		Envelope				
Site C	F	loor Area				Quantity
	Level	(m2)	Use	GFA (m2)	NLA (m2)	of Units
Podium	GF	765	retail/comm	689		
	1	961	retail/comm	865		
				1,553		
C1. tower	2	508	residential	381	343	4
	3	508	residential	381	343	4
	4	360	residential	270	243	3
	5	360	residential	270	243	3
	6	360	residential	270	243	3
	7	360	residential	270	243	3
		2456		1,842	1,658	21
Residential Total Site C				1,842	1,658	21
Commercial Total Site C				1,553		
				3,395		

				Parking	Parking
	Туре	% Mix	Qty	Rate	Spaces
Site C Apartments & Parking	1 Bed	10%	2	1	2
	2 Bed	80%	17	1	17
	3 Bed	10%	2	2	4
	Total residents	s parking			23
	Visitor	r Parking		1 per 6 apt	3
	Commercia	l Parking		1 per 50m2 GFA	31
					57
					Required
			Available		m2
	m2	Levels	m2	Car Spaces	38m2/car
Parking Site C					
parking deck - above ground	-	2.00	-		
parking deck - underground	961	3.30	3,171		
			3,171	57	2,178

### High Street Penrith Yield Testing

Development Assumptions	
Commercial Efficiency	90%
Residential Efficiency	
Envelope to GFA	75%
GFA to NLA	90%
apartment type	apt size (m2)
1br	60
2br	80
3br	100



# 15 Summary

#### FSR Calculation

Site	Area (m2) To	tal GFA (m2)	FSR : 1	Notes
A. (Stage 1)	4,872	33,490	6.9	
				EXCLUDES: Eat Street, Union Lane, parking deck both above & below ground
В.	11,330	56,336	5.0	INCLUDES: Eat Street / EXCLUDES: John Tipping Grove, parking above & below
				ground
С.	1,051	3,395	3.2	
				EXCLUDES: Eat Street, Union Lane, parking above/below ground
Combined Sites	17,253	93,221	5.40	INCLUDES eat Street / EXCLUDES: John Tipping Grove, Union Lane, parking
				above & below ground

#### Summary Residences

Site	1Bed	2Bed	3Bed	
A	28	221	29	278
В	53	426	53	532
С	2	17	2	21
	83	664	84	831

# JBA High Street Penrith - Urban Design Report

0

BB