

04 Master Plan Site Plan

HEFERON ROAD

Concept Master Plan

The concept master plan realises the design principles established for the site, and builds upon the Hill Thalis concept plan.

A legible network of streets and open space is provided by extending the lot structure established in stage 1. This connects and integrates the public domain, using Meriton Boulevard as an interface between the two sites.

Meriton and HASSELL have adopted and evolved some of the elements of the Hill Thalis scheme at Council's request. These have been tested and built upon to exceed the performance of the Hill Thalis master plan in the following ways:

A network of public open space is strategically located and connected for resident and visitor recreation. The centrally located public open space has been rotated to maximise solar access to the open space and adjacent residential. There is also provision for a civic space, centrally located adjacent to the wedge park which will complement the stage 1 master plan.



04 Master Plan 3D views

Elements of the existing buildings along Heffron Road have the capacity to be kept, to respect the sites heritage and character.

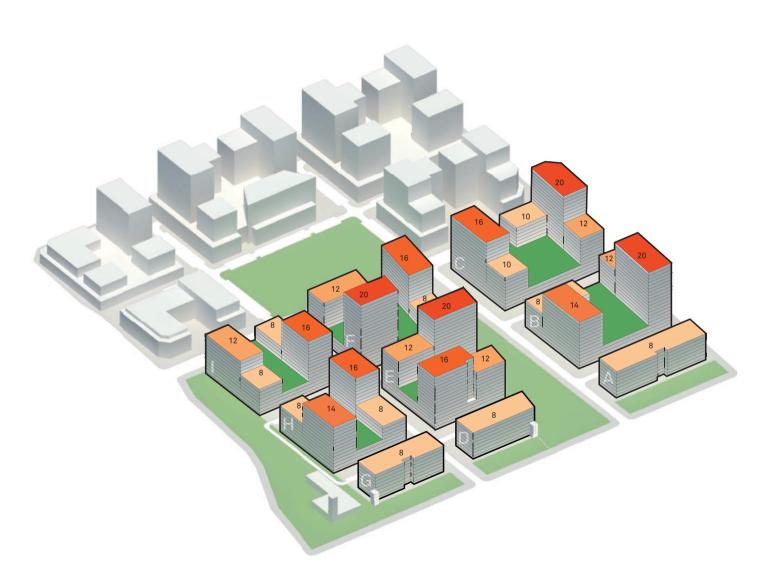
The concept plan removes the need for non-habitable facades across the entire site. All facades in the master plan are habitable, having a 24 metre seperation to allow to maximum solar access.

Above ground parking has been used to avoid the need for excessive excavation and landfill. This addresses environmental constraints associated with soil conditions, contamination and groundwater. It also provides for natural ventilation of parking areas as well as better amenity for the podium communal spaces.

Adopts the streetscape design proposed by Hill Thalis to maximise solar access and pedestrian amenity. Larger setbacks have been provided to the north, east and western building frontages to maximise solar access.

A summary of the site efficiency for the concept plan is below:

Site area	86,574sqm	
Lot Areas	45,448sqm	52%
Community Space	2,060sqm	1%
Open space	26,085sqm	30%
Civic	1,000sqm	1%
Roads (including footpaths and landscape zones outside lot boundary)	17,141sqm	15%



Open space and deep soil areas

Communal or public open space in the Stage II master plan is responsive to the existing pattern and uses of the neighbourhood and stage I master plan. Public open space accounts for approximately 30% of the total site area of the concept plan, and is capable of providing deep soil.

Open space is also provided on residential podiums, above the sleeved residential and car parking. This open space is for residents only, a solar access analysis for these areas is provided on page 39.

As per the ADG, objectives 3D-1, 3D-4 and 3E-1 are met in the adjacent concept plan:

- _Communal open space has a minimum area equal to 25% of the site
- _Deep soil zones are to meet a minimum requirement of 7% of the total site area.
- _The public open space is well connected with public streets along at least one edge
- _Solar access should be provided year round with protection for strong winds
- _A positive address and active frontages should be provided adjacent to public open space



Wedge Park = 9,540m² (excl. 1,000m² civic

Northern Park (adjacent to lots A,D and G)

=4.110m²

3 Bunnerong Road = 10,510m²

Pocket Parks = 1,625m²

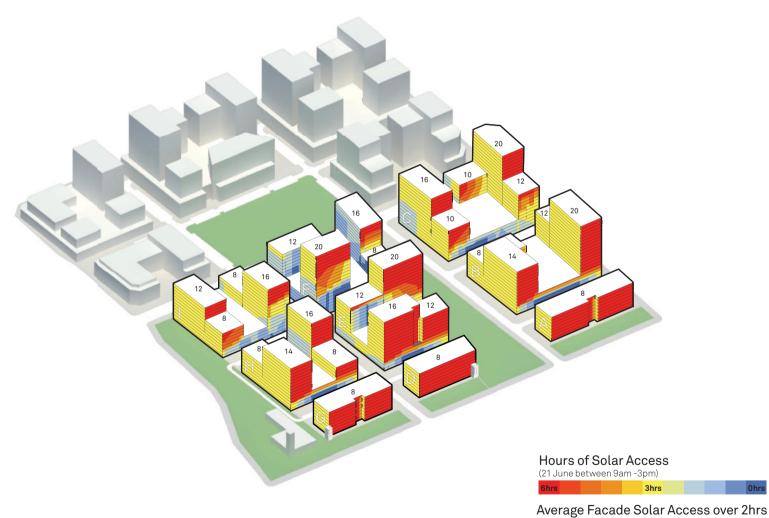
HEFFRON ROAD

Solar Access

Solar access is the ability of a building to receive direct sunlight without obstruction from other buildings or impediments, but excluding trees. The ADG states in objective 4A-1 that:

1. Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9am and 3pm at mid winter in the Sydney Metropolitan Area

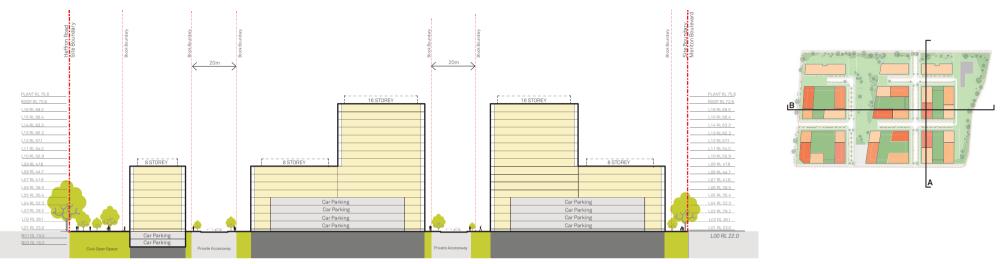
A high level facade solar access analysis has been performed on the concept plans for Stage II. This analysis has established that the concept plan provides the framework to comply with the minimum ADG requirements subject to detailed building design. In Meriton's experience on previous projects, any facade analysis showing about 60% is more than capable of achieving 70% at DA stage.



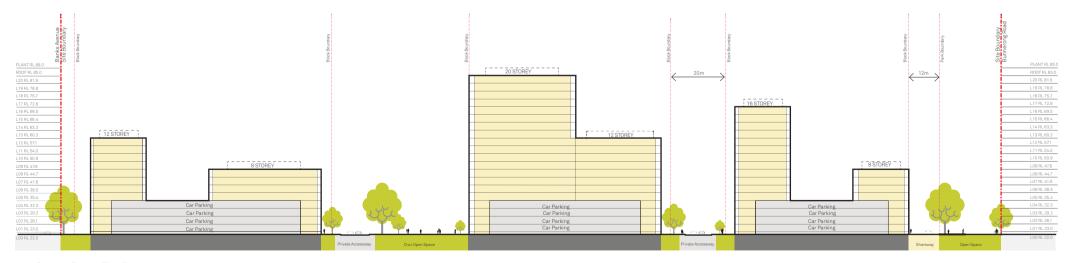
Lot	Area	D	63%	G	66%
Α	63%	Е	60%	Н	79%
В	80%	F	67%	I	79%
C	78%				

04 Master Plan

Site Sections



Section A-A



Section B-B

04 Master Plan **Street Sections**

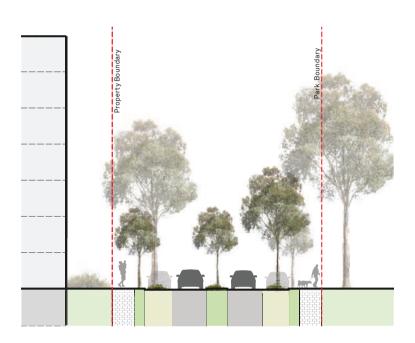
North South Street and share way

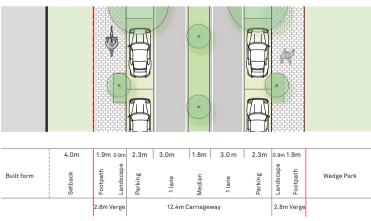
North South Streets provide connections through the development. The street incorporates a shared pathway for pedestrians and cyclists that connects with the Wedge Park and Civic Plaza, while the carriageway accommodates two lanes with parking on either side of the road.

Street sections have been adopted from the approach taken in the Hill Thalis master plan, incorporating setback dimensions established in the Stage 1 approved concept plan.

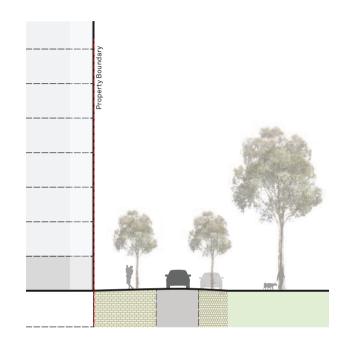
Some roads have been removed as per traffic advice which increases the amount and function of the open space.

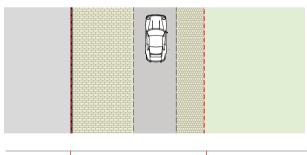












Built form		Bunnerong Edge Psrk
	12.0m Shareway	

12.0m Road Reserve

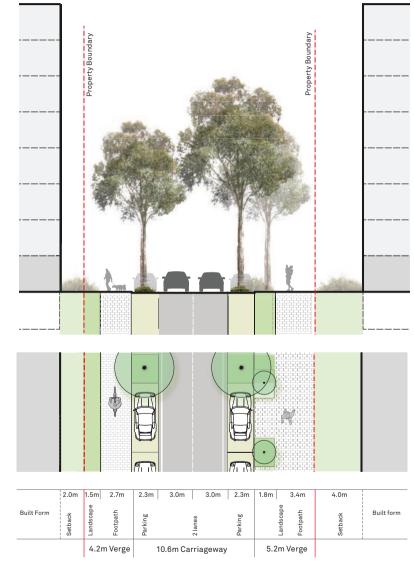
33 **BATA Urban Design Report**

04 Master Plan Street Sections

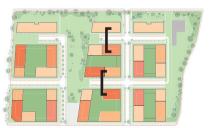
East West Street

East-West Streets provides a shaded connection from east to west between residential blocks. An appropriate road reserve allows for avenue street trees and on street parking. Landscaped setbacks between the footpaths and the adjacent ground floor apartments will give the street a more generous landscaped proportion while allowing more access to sunlight.

Street sections have been adopted from the approach taken in the Hill Thalis master plan, incorporating setback dimensions established in the Stage 1 approved concept plan.



20.0m Road Reserve



04 Master Plan Street Sections

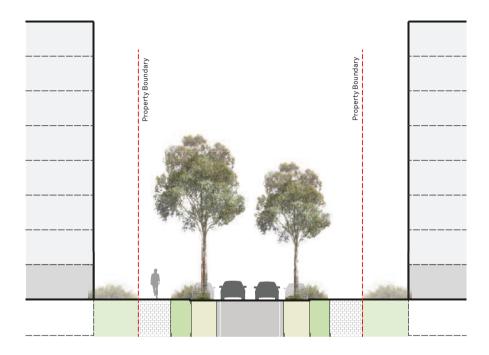
North South Street

North South Streets provide connections through the development. The street incorporates a shared pathway for pedestrians and cyclists that connects with the Wedge Park and Civic Plaza, while the carriageway accommodates two lanes of thoroughfare with parking on either side of the road.

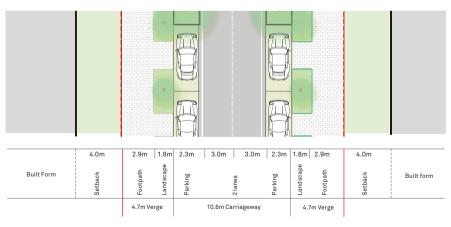
Landscaped setbacks between the footpaths and the adjacent ground floor apartments will give the street a more generous landscaped proportion while allowing more access to sunlight.

Street sections have been adopted from the approach taken in the Hill Thalis master plan, incorporating setback dimensions established in the Stage 1 approved concept plan.

The connection to Heffron Road has been supported by the traffic report.





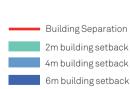


20m Road Reserve

BATA Urban Design Report 35

Building Separation

Building separation assists in providing residential amenity including visual and acoustic privacy, natural ventilation, sunlight and daylight access and outlook. It also provide suitable areas for communal open spaces, deep soil zones and landscaping, which has been explored in the master plan strategy. The building separations used meet the minimum requirements set out by the Apartment Design Guide (Section 2F)





04 Master PlanBuilding Heights

Building Heights

Contributing to the quality of a place, building height defines the proportion and scale of streets and public spaces, having a relationship to the physcial and visual amenity of a development.

It is representative of the heights established under Part I and uses the same philosophy to provide low scale buffer on the sensitive edges. The concept plan places the greater height and density on the least sensitive parts of the site to the south and west while still being conscious of shadow impacts on the approved and proposed open space.





BATA Urban Design Report

Shadow analysis

Summer



9am

8% open space overshadowing 26% Private open space overshadowing



10am

8% open space overshadowing 18% Private open space overshadowing



11am

0.5% open space overshadowing 14% Private open space overshadowing



12pm

0.6% open space overshadowing 12% Private open space overshadowing



3% open space overshadowing 21% Private open space overshadowing



2pm

4% open space overshadowing 28% Private open space overshadowing



3pm

8% open space overshadowing 42% Private open space overshadowing

Shadow analysis

Winter



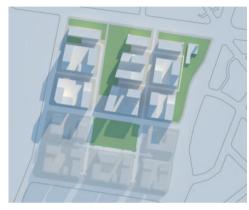
9am

22% Public open space overshadowing 60% Private open space overshadowing 76% Stage 01 Public open space overshadowed Stage 02



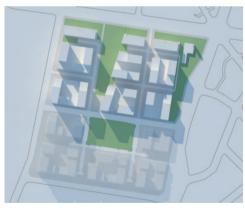
1pm

18% Public open space overshadowing 55% Private open space overshadowing 42% Stage 01 Public open space overshadowed Stage 02



10am

10% Public open space overshadowing
42% Private open space overshadowing
58% Stage 01 Public open space overshadowed Stage 07



2pm

30% Public open space overshadowing
62% Private open space overshadowing
53% Stage 01 Public open space overshadowed Stage



11am

0.5% Public open space overshadowing 28% Private open space overshadowing 33% Stage 01 Public open space overshadowed Stage 02



12pm

0.6% Public open space overshadowing 26% Private open space overshadowing 34% Stage 01 Public open space overshadowed Sta



3pm

18% Public open space overshadowing 71% Private open space overshadowing 83% Stage 01 Public open space overshadowed Stage 02

04 Master Plan Yield Summary

2068 dwellings 210,837sqm² GFA* FSR 2.35:1

*includes 4,060sqm community use, of which 2,000sqm is in a location and configuration to be determined and therefore not shown on the plan.

Unit Type	Mix	GFA (sqm)	Average (sqm)	CP Rate (spaces)	Average (spaces)
3 Bed	10%	100	10	1.5	0.15
2 Bed	70%	100	70	1	0.7
1 Bed	20%	100	20	0.5	0.1
Studio	0%	100	0	0	0
			100		0.95
				\/ioitor	1 anges per 10 desellings

FOOTPRINT STOREY EFFICIENCY

GFA

YIELD

3 Bed 2 Bed 1 Bed

Assumed Efficiency	75%
Assumed Area per car space	40 sqm

BLOCK

BUILDING

		(sqm)			(sqm)	(units)
A	1	1850	8	75%	11,100	111
Sub-to	otal	1850			Sub-total	111
3	1	1035	20	75%	13,662	137
	2	1020	14	75%	8,874	89
	3	995	8	75%	3,881	39
	4	485	12	75%	3,492	35
	Sleeving	976	4	75%	2,928	29
Sub-to		4511			Sub-total	328
;	1	525	12	75%	3,780	38
	2	525	10	75%	2,993	30
	3	990	16	75%	10,098	101
	4	645	10	75%	3,677	37
	5	950	20	75%	12,540	125
	Sleeving	1042	4	75%	3,126	31
Sub-to		4677			Sub-total	362
	1	1330	8	75%	6,484	65
Sub-to	otal	1330			Sub-total	65
	1	650	12	75%	4,680	47
	2	855	16	75%	8,721	87
	3	740	12	75%	5,328	53
	4	920	20	75%	12,144	121
	Sleeving	841	4	75%	2,523	25
Sub-to		4006			Sub-total	334
:	1	540	8	75%	2,268	23
	2	800	20	75%	10,560	106
	3	970	12	75%	6,984	70
	4	1000	16	75%	10,200	102
	Sleeving	1126	4	75%	3,378	34
Sub-to		4436			Sub-total	334
i	1	1390	8	75%	6.776	68
Sub-to	otal	1390			Sub-total	68
	1	760	8	75%	3,192	32
	2	870	14	75%	7,569	76
	3	650	8	75%	2,730	27
	4	750	16	75%	7,650	77
	Sleeving	840	4	75%	2,520	25
ub-total	·	3870			Sub-total	237
	1	770	16	75%	7,854	79
	2	540	8	75%	2,268	23
	3	990	12	75%	7,128	71
	4	750	8	75%	3,150	32
	Sleeving	840	4	75%	2,520	25
ub-total		3890			Sub-total	229
	eritage (corner of Bunn		n Rd)		2060	
	community floorspace				2000	

29960

Total Site Area	8.9574 ha		
Total GFA	210,837 sqm		
Average FSR*	2.35 :1	indicative only	
Occupancy per unit	1.6		
S94 open space req.	0.7 ha/1000	person	
Total population	3308 persons		
Open space req.	2.32 ha	Achieved	2.61 ha
	23 159 sam		26 085 sam

Lot	Above ground parking area	TOTAL AREA	ABOVE GROUND	BASEMENT	DEMAND	SUPPLY	NET
	(sqm)	(sqm)	(Levels)	(Levels)	(spaces)	(spaces)	(spaces)
Α	1,850	3,700	0	2.0	117	93	-24
В	3,915	15,656	3-4	0.0	345	391	47
С	4,250	17,000	3-4	0.0	380	425	45
D	1,330	2,660	0	2.0	68	67	-2
E	2,955	11,820	3-4	0.0	351	296	-55
F	3,780	15,120	3-4	0.0	351	378	27
G	1,390	2,780	0	2.0	71	70	-2
H	2,800	11,200	3-4	0.0	248	280	32
I	2,815	11,260	3-4	0.0	241	282	41
Total	23,235	87,496	0	0.0	2,171	2,280	109

Australia

Adelaide HASSELL Level 1

82 Waymouth Street

Adelaide SA Australia 5000

Т +61 8 8220 5000

adelaide@hassellstudio.com

Brisbane

HASSELL 36 Warry Street Fortitude Valley QLD Australia 4006

+61 7 3914 4000

E brisbane@hassellstudio.com

Melbourne

HASSELL 61 Little Collins Street Melbourne VIC Australia 3000 +61 3 8102 3000

melbourne@hassellstudio.com

Perth

HASSELL Level 1 Commonwealth Bank Building 242 Murray Street Perth WA Australia 6000 +61 8 6477 6000

perth@hassellstudio.com

Sydney

HASSELL Level 2

Pier 8/9, 23 Hickson Road

Sydney NSW Australia 2000

+61 2 9101 2000

E sydney@hassellstudio.com

China

Beijing

HASSELL Suite 308-B011 Building A Beijing Fortune Centre 7 Middle Dong San Huan Road **Chaoyang District** Beijing 100026 China +8610 5126 6908

E beijing@hassellstudio.com

Hong Kong HASSELL

22F. 169 Electric Road North Point Hong Kong +852 2552 9098

E hongkong@hassellstudio.com

Shanghai

HASSELL

12F base 45 Caoxi North Road

Xuhui District

Shanghai 200030 China +8621 5467 9333

E shanghai@hassellstudio.com

South East Asia

Singapore

HASSELL

33 Tras Street #02-01 078973 Singapore

T +65 6224 4688

E singapore@hassellstudio.com

United Kingdom

Cardiff

HASSELL

Level 4 James William House

9 Museum Place

Cardiff CF10 3BD United Kingdom

+44 29 2072 9071

E cardiff@hassellstudio.com

London

HASSELL

Ground Floor 1 Curtain Place London EC2A 3AN United Kingdom

+44 20 7490 7669

london@hassellstudio.com