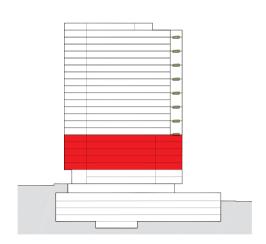
4.0 PROJECT DESCRIPTION



#### 4.2.5 TYPICAL LOW RISE FLOOR (LEVEL 3 - 7)

The typical floorplate has a gross area including balconies of 1240sqm. The low rise floorplate consist of 13 residential apartments comprising 1 x studio, 6 x one bedroom apartments and 6 x two bedroom apartments.

Outstanding amenity is provided to central corridor areas via two flared garden 'slots' located at the end of the internal circulation corridor, opening to 4.5 metres in width at the perimeter. These garden slots are two storeys in height and contain external planting at the base of each, staggering in height such that one garden exists on each residential floor. The garden 'slots' enable:

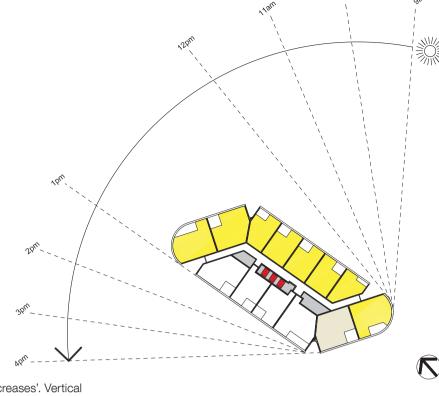
/ Sunlight to penetrate deep into the core,

/ Corridors to be naturally ventilated with operable louvres located at both ends,

/ Additional daylight into, and pleasant garden views out, from apartments located immediately adjacent them,

/ Crossflow ventilation to be achieved in apartments immediately facing them.

A mix of studio, one bedroom and two bedroom apartments are located adjacent the garden slots and 'creases'. Generally living rooms are located adjacent the 'slots' to enable pleasant



while bedrooms are located adjacent the 'creases'. Vertical linear screening on the 'creases' directs views outward, preventing overlooking between apartments while allowing natural light and ventilation in.

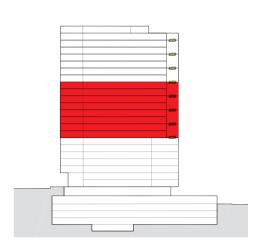
Low rise floors achieve 8 out of 13 apartments (61%) achieve a minimum of 2 hours of solar access to their living rooms and private open spaces on 21st June.

8 out of 13 apartments (61%) achieve crossflow ventilation through a combination of dual aspect apartments located i) in curved ends, ii) adjacent garden slots, and iii) adjacent the vertical 'creases'. This is slightly in excess of the 60% required by the ADG.





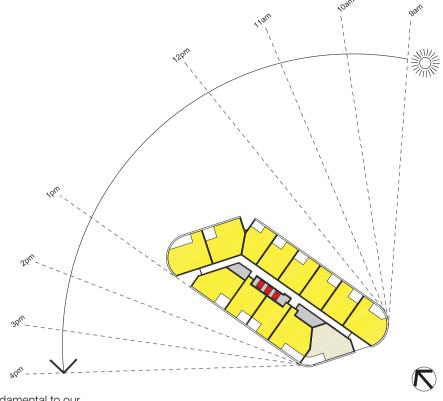
4.0 PROJECT DESCRIPTION



#### 4.2.6 TYPICAL MID RISE FLOOR (LEVEL 8 - 15)

Above level 7, the southern 'garden slot' alters location and switches from an eastern to southern orientation. This change occurs to create an external massing articulation of 9 storeys on the eastern frontage, while also allowing direct line of sight views out from the lift lobby.

7 x one bedroom apartments ranging from 51 to 55 sqm net internal area are provided, each with a balcony of between 8 and 9 sqm. Larger one bedroom apartments facing East are slightly deeper than those facing west and contain a generous storage / study / media area at the rear of the apartment. Slightly more compact 51sqm one bedroom apartments face west and are provided with conventional storage located near apartment entries. All one bedroom living rooms are a minimum of 3.6 metres in width and all bedrooms achieve a width of 3.0 metres, in accordance of ADG requirements. In excess of ADG requirements, all bedrooms and living rooms are provided with full width facade frontage to maximise amenity through access to daylight and natural ventilation.



Although the building is partially curved, fundamental to our planning approach has been to adopt regular orthogonal room geometry in almost all scenarios, thereby virtually eliminating angled rooms or spaces which can be difficult to furnish.

A mixture of two bedroom apartments ranging from 71 to 78 sqm are provided in both 1 bath and 2 bath varieties. Living areas and balconies in two bedroom apartments are located outboard such that both can receive a minimum of 2 hours of solar access on the winter solstice in accordance with ADG requirements.

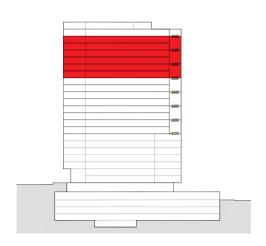
In all two bedroom apartments, living areas are increased in width to 4.0m width in accordance with ADG requirements. Where possible in curved ends, both living and dining areas are located adjacent the facade to maximise panoramic views out.

12 out of 13 apartments (92%) in the upper mid rise floors achieve a minimum of 2 hours of solar access to their living rooms and private open spaces on 21st June. 1 out of 13 (7%) apartments achieve no direct solar access on 21st June, well below the maximum 15% permissible under the ADG.





4.0 PROJECT DESCRIPTION

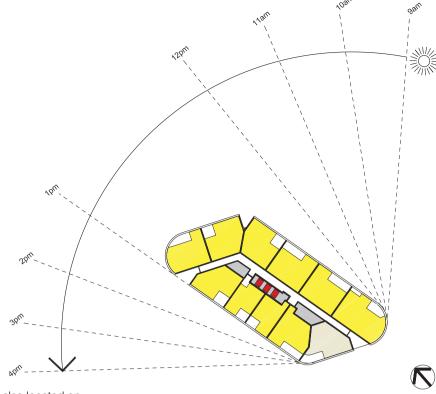


#### 4.2.7 TYPICAL HIGH RISE FLOOR (LEVEL 16 - 21)

Above level 15,  $5 \times 0$  one bedroom and  $1 \times 0$  two bedroom apartments facing east are replaced by  $3 \times 0$  two bedroom apartments and  $1 \times 0$  three bedroom apartment, creating a total of 11 apartments per floor.

The two bedroom apartments facing east are larger in size than typical, each approximately 86sqm internal with an oversized balcony of 13 sqm, and contain two bathrooms, larger walk-in robes in master bedrooms, and a flexible storage / media area.

The three bedroom apartment is 106 square metres in area and has been located at the southern end of the floorplate where it benefits from panoramic city views from both the living and dining area, in addition to view outlook from the kitchen onto the 'garden slot' and associated opportunity for cross ventilation. All three bedrooms are provided with full width facade frontage in keeping with our key design principles established for the project.



Two compact one bedroom apartments are also located on high rise floors with Western orientation with an internal area of 55 square metres.

10 out of 11 apartments (91%) in the high rise floors achieve a minimum of 2 hours of solar access to their living rooms and private open spaces on 21st June. 1 out of 13 (7%) of apartments achieve no direct solar access on 21st June, well below the maximum 15% permissible under the ADG.





4.0 PROJECT DESCRIPTION

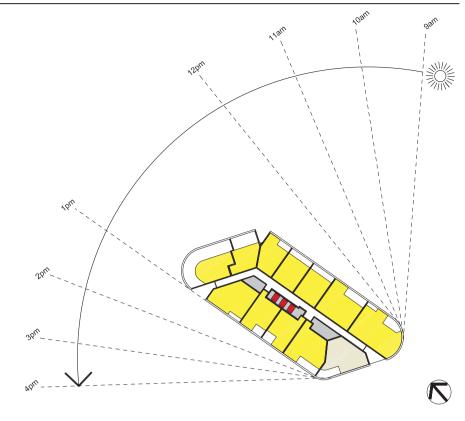


# 4.2.8 LEVEL 22

Level 22 is the uppermost floor served by the main lift bank. It provides access to 12 apartments, 7 of which are two storey penthouses located in the northern portion of the floorplate and in a series of two and three bedroom configurations ranging in internal area from 89 to 141 square metres nett.

The two northernmost penthouses, a two and a three bedroom apartment, have inboard living areas located on the entry level and are lined with extensive north facing outdoor terraces. The outdoor terrace areas are two storeys in height, enabling solar access to reach deep into living areas, while also creating a strong two storey scale articulation to the top of the tower.

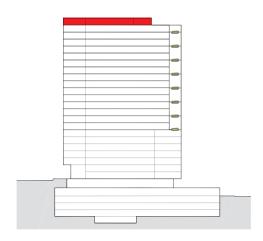
The remaining penthouses provide bedroom, study and storage areas on the entrance level with stairs and internal voids located beneath skylights leading to living areas on upper floors.







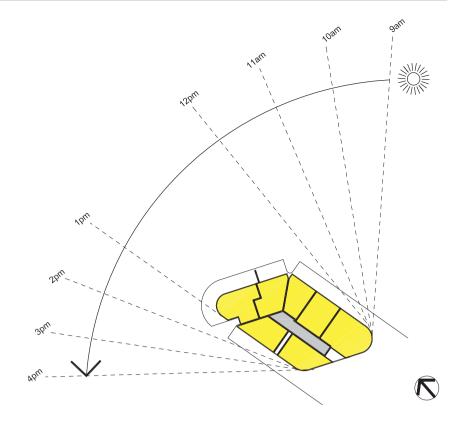
4.0 PROJECT DESCRIPTION



#### 4.2.9 LEVEL 23

Level 23 is set back by 3 metres from the floorplate below on north, east and west frontages, and has a total area of 400 square metres internally. It's size and location are determined by the height plane which reflect the steep natural ground level of the site.

Two storey penthouses with living areas on level 23 benefit from expansive outdoor terraces. The set back plan results in shallow apartment depths which receive generous facade and terrace frontages. Terrace areas are protected from high wind speeds by 1.8m high glass screens set back 800mm from the building edge, enabling a facade maintenance zone with independent access from the main service core to be achieved.







4.0 PROJECT DESCRIPTION

# 4.3 AMENITY

Apartments have been arranged to maximise the number of dwellings with access to direct sunlight and opportunities for cross ventilation.

#### 4.3.1 SOLAR ACCESS

A total of 71% of dwellings will achieve at least 2 hours direct sunlight to their balconies and living spaces between 9am and 3pm on the winter solstice. The relevant apartments are identified on the adjacent spreadsheet.

Achieves min. 2 hr Solar Access during mid-winter

Achieves min. 1 hr Solar Access during mid-winter

# Residential Unit Solar Access Schedule

Use	Level	Height		Apartmen	t Number															
			m	E			S		W				N		E		2hrs	>1hrs	No Sun	Total Units Per
Penthouses	L23	135.20	3.10																	
Fentilouses	L22	132.10	3.10	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212		11	0	1	12
	L21	129.00	3.10	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111			10	0	1	11
	L20	125.90	3.10	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011			10	0	1	11
High-Rise	L19	122.80	3.10	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911			10	0	1	11
3	L18	119.70	3.10	1801	1802	1803	1804	1805	1806	1807	1808	1809	1810	1811			10	0	1	11
	L17	116.60	3.10	1701	1702	1703	1704	1705	1706	1707	1708	1709	1710	1711			10	0	1	11
	L16	113.50	3.10	1601	1602	1603	1604	1605	1606	1607	1608	1609	1610	1611			10	0	1	11
	L15	110.40	3.10	1501	1502	1503	1504	1505	1506	1507	1508	1509	1510	1511	1512	1513	12	0	1	13
	L14	107.30	3.10	1401	1402	1403	1404	1405	1406	1407	1408	1409	1410	1411	1412	1413	8	4	1	13
	L13	104.20	3.10	1301	1302	1303	1304	1305	1306	1307	1308	1309	1310	1311	1312	1313	8	4	1	13
Mid-Rise	L12	101.10	3.10	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	8	4	1	13
Wild Triod	L11	98.00	3.10	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	8	4	1	13
	L10	94.90	3.10	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	8	4	1	13
	L09	91.80	3.10	901	902	903	904	905	906	907	908	909	910	911	912	913	8	4	1	13
	L08	88.70	3.10	801	802	803	804	805	806	807	808	809	810	811	812	813	8	4	1	13
	L07	85.60	3.10	701	702	703	704	705	706	707	708	709	710	711	712	713	8	4	1	13
	L06	82.50	3.10	601	602	603	604	605	606	607	608	609	610	611	612	613	8	4	1	13
	L05	79.40	3.10	501	502	503	504	505	506	507	508	509	510	511	512	513	8	4	1	13
Low-Rise	L04	76.30	3.10	401	402	403	404	405	406	407	408	409	410	411	412	413	8	4	1	13
	L03	73.20	3.10	301	302	303	304	305	306	307	308	309	310	311	312	313	8	4	1	13
	L02	70.10	3.10	201	202	203	204	205	206	207	208	209	210	211			6	4	1	11
	L01	67.00	3.10	101	102	103	104	105	106	107	108	109	110	111			6	4	1	11
																	191	56	22	269
																	71%	21%	8%	

4.0 PROJECT DESCRIPTION

# Principle 6: Amenity

Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well being.

Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas and ease of access for all age groups and degrees of mobility.

#### **4.3.2 CROSSFLOW VENTILATION**

A total of 60% of apartments below Level 08 have windows facing in more than one direction and are deemed to be naturally cross ventilated, in compliance with ADG requirements.

Above the 9th Storey (Level 07), the ADG does not require apartments to be cross ventilated, however a total of 92 apartments above Level 07 achieve crossflow ventilation.

The relevant apartments are tabulated below.

Cross Flow apartments within first 9 storeys

Cross Flow apartments above 9 storeys

## **Residential Unit Cross-Ventilation Schedule**

Jse	Level	Height		Apartment Number														Cross		
		RL m		E			S	\	N				N		E		Flow Units	Total Units		
Penthouses	L23	135.20	3.10																	
	L22	132.10	3.10	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212		9	12		
	L21	129.00	3.10	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111			6	11		
	L20	125.90	3.10	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011			6	11		
High-Rise	L19	122.80	3.10	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911			6	11		
	L18	119.70	3.10	1801	1802	1803	1804	1805	1806	1807	1808	1809	1810	1811			6	11		
	L17	116.60	3.10	1701	1702	1703	1704	1705	1706	1707	1708	1709	1710	1711			6	11		
	L16	113.50	3.10	1601	1602	1603	1604	1605	1606	1607	1608	1609	1610	1611			6	11		
Mid-Rise	L15	110.40	3.10	1501	1502	1503	1504	1505	1506	1507	1508	1509	1510	1511	1512	1513	6	13		
	L14	107.30	3.10	1401	1402	1403	1404	1405	1406	1407	1408	1409	1410	1411	1412	1413	6	13		
	L13	104.20	3.10	1301	1302	1303	1304	1305	1306	1307	1308	1309	1310	1311	1312	1313	6	13		
	L12	101.10	3.10	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	6	13		
	L11	98.00	3.10	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	6	13		
	L10	94.90	3.10	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	6	13		
	L09	91.80	3.10	901	902	903	904	905	906	907	908	909	910	911	912	913	6	13		
	L08	88.70	3.10	801	802	803	804	805	806	807	808	809	810	811	812	813	6	13		
Low-Rise	L07	85.60	3.10	701	702		704	705	706	707	708	709	710	711	712	713	8	13	9th Sto	
	L06	82.50	3.10	601	602		604	605	606	607	608	609	610	611	612	613	8	13		
	L05	79.40	3.10	501	502		504	505	506	507	508	509	510	511	512	513	8	13		
	L04	76.30	3.10	401	402		404	405	406	407	408	409	410	411	412	413	8	13		
	L03	73.20	3.10	301	302		304	305	306	307	308	309	310	311	312	313	8	13		
	L02	70.10	3.10	201	202		204	205	206	207	208	209	210	211			6	11		
	L01	67.00	3.10	101	102	103	104	105	106	107	108	109	110	111			6	11		
	UG																			
	LG																			

4.0 PROJECT DESCRIPTION

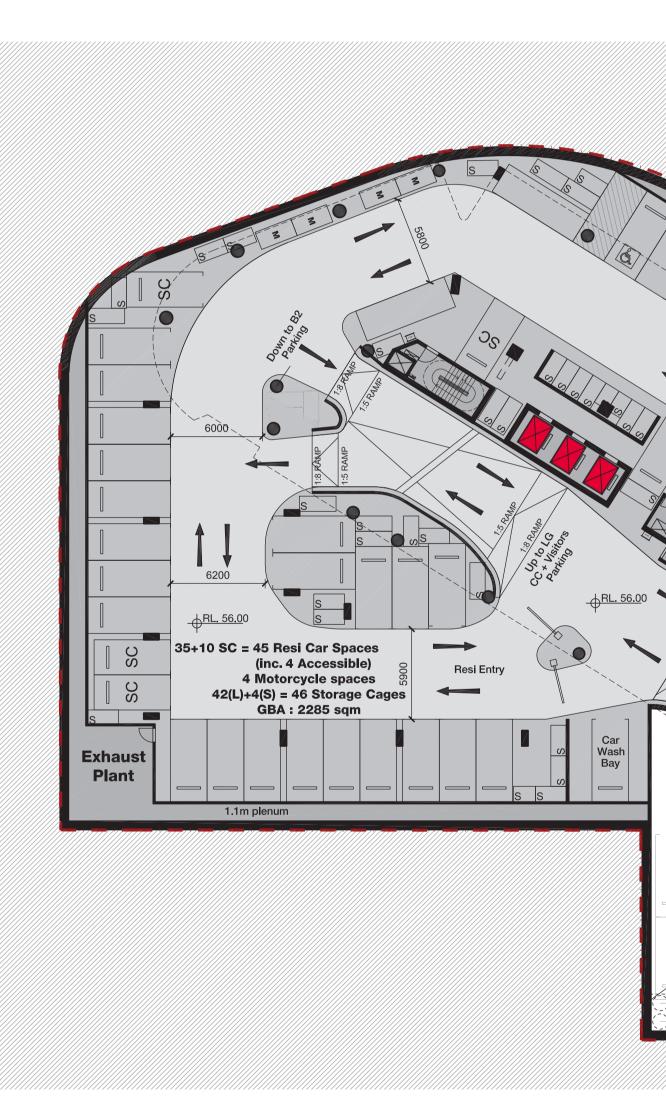


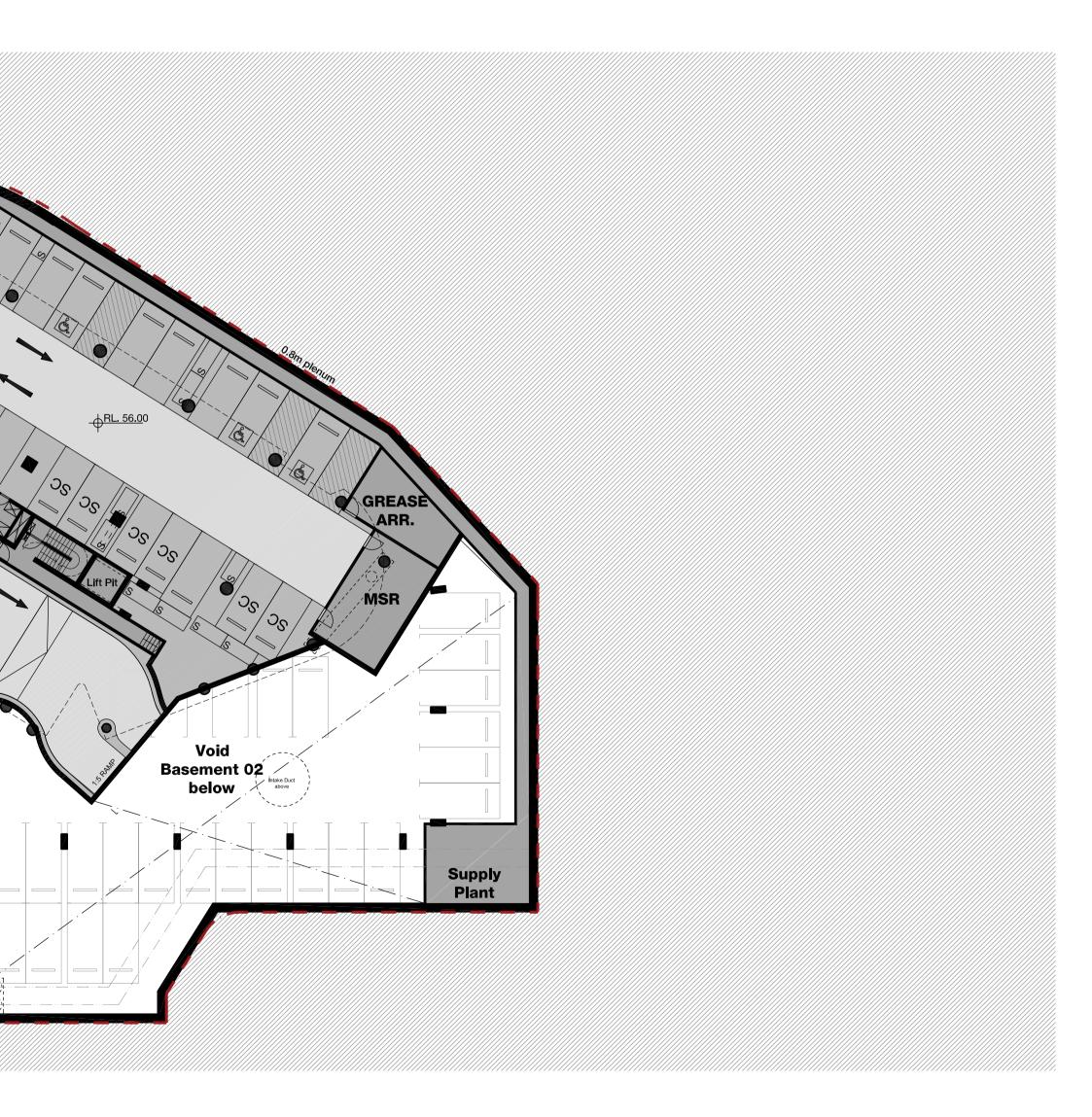
#### **4.4 BASEMENT LEVEL 01**

All cars arriving into the site enter via the ramp located at lower ground floor level and proceed to Basement Level 01.

At the base of the entry ramp, residents will turn left where a boom gate will restrict access to residential parking floors below to residents only.

Visitors, childcare centre staff and patrons will proceed forwards and return to the lower ground floor via a ramp directly ahead, where the childcare and visitor parking areas provide direct and level access to the residential and childcare lobbies. (Refer to 4.2.1 Upper Ground Floor).





4.0 PROJECT DESCRIPTION



#### **4.5 TYPICAL BASEMENT FLOOR**

 $2\ x$  basement floors are proposed beneath Basement Level 01 with each providing 80 and 83 residential parking spaces respectively.

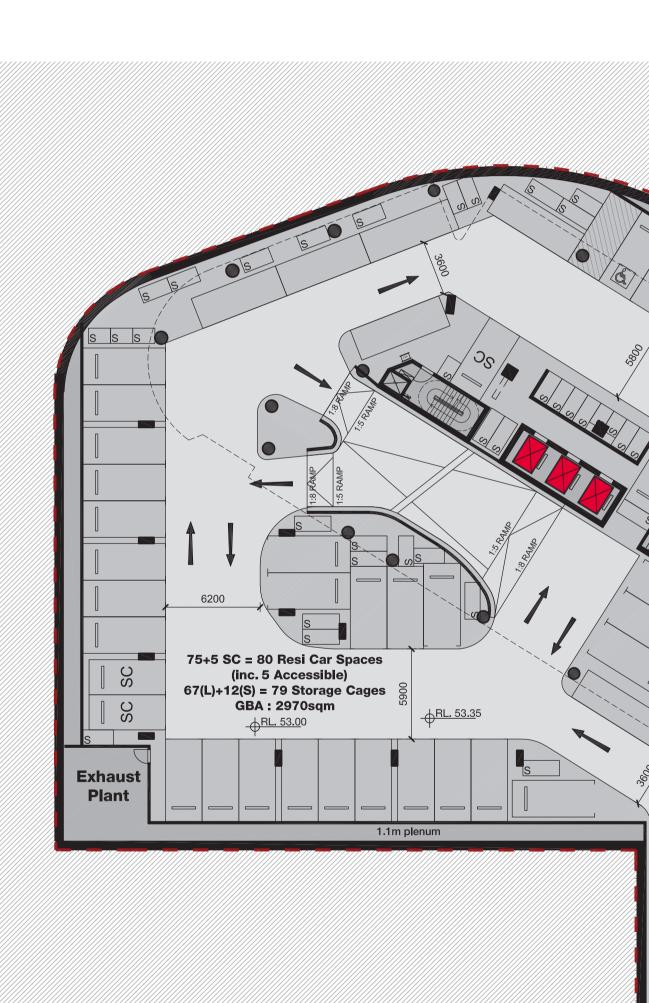
The main circulation ramp is centrally located with a short length of two way roadway connecting the top and bottom of each ramp. Downwards movement is via short and continuous left movements, while upwards movements are similarly via short and continuous right movements.

Upon reaching the appropriate floor, vehicles will peel away from the two-way circulation ramp and proceed along a 1 way circulation loop around each floor providing access to the parking spaces.

Direct lift access is provided from residential floors to all basement floors, with lifts and stairs centrally located. A total of 269 Storage Cages are provided throughout the basement. Refer to storage schedule located in Appendix D of this report. Storage cages have been provided in accordance with AS.2890.3 and are therefore deemed to enable storage of resident bicycles. As such, minimum separate and dedicated bicycle parking is provided only Lower Ground Floor.

A total of 13 x accessible parking spaces are provided between Basement Level 01 and Level 03. These have been located close to lifts to ensure minimum travel distances for wheelchair users.

4 tandem parking spaces are provided in the south western portion of the floorplate, together with 1 tandem parking space provided adjacent to the core on Basement Level 02 and Level 03. These spaces will be assigned to larger three bedroom and penthouse apartments requiring 2 spaces per unit.



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5.0 APARTMENT PLANNING

# 5.0 APARTMENT PLANNING

### **5.1 TYPICAL APARTMENT TYPES**

Although the building has a partially curved form, apartments have been designed to create simple rectilinear spaces with high amenity achieved through solar access and views outlook. The floorplate accommodates a range of single frontage and dual aspect apartment types and sizes. Living rooms to all apartments are located outboard to maximise solar access during mid winter.

Apartments have been designed to be highly compliant with ADG requirements. Living rooms of one bedroom apartments are minimum 3.6m wide, with all bedrooms being minimum 3m in width. All one bedroom apartments are larger than 50sqm in area, in accordance with ADG requirements, with balcony size varying from 8-9 sqm, in accordance with ADG requirements.

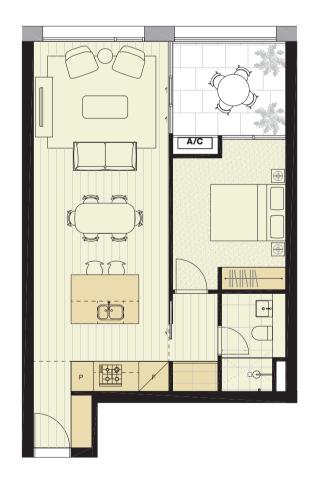
In smaller one bedroom apartments, dimensions have been carefully refined to provide island kitchens of a sufficient depth to double up in use as a breakfast bar, with discreet access

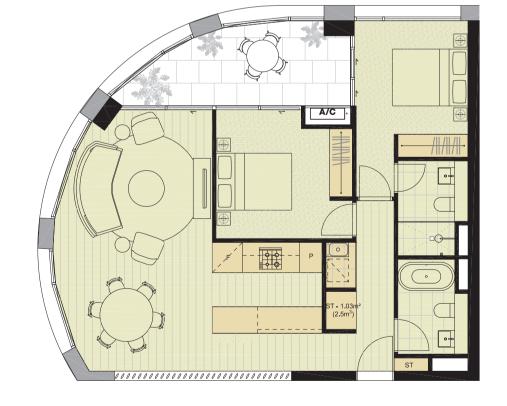
to laundry, bathroom and bedroom areas located away from the living / entertaining area. Most storage cupboard area provided adjacent to entries area designed in accordance with ADG requirements, with each apartment also receiving a storage cage within the basement.

All two bedroom apartments provide a minimum living room width of 4m in accordance with ADG requirements, with the exception of apartments in the curved ends of the floorplate where an average width of 4m has been adopted. All two bedroom - one bathroom types are a minimum of 70 sqm internal area, while all two-bedroom two bathroom types are a minimum of 75 sqm internal area, in accordance with ADG requirements. Balcony areas for two bedroom apartments vary from 10-13 sqm, in accordance with ADG requirements of 10sqm for two bedroom units.

Vertical facade articulation has been carefully placed to reduce the glazing area facing east and west while still balancing the need to achieve solar access in mid winter. A series of 400mm deep, 800mm wide projecting vertical precast concrete facade elements are carefully located so as to provide some internal shading, to enable interface of balcony door sets with the tower facade, and to integrate the tower structure into the facade and internal planning.

A full summary of ADG compliance for residential units is contained within Appendix B. Detailed schedules outlining residential unit mix and sizes is contained within chapter D, along with storage calculations and schedules for each apartment type.





# **5.2 TYPICAL 1 BEDROOM APARTMENT**

INTERNAL AREA: 56 SQM BALCONY: 8 SQM

# **5.3 TYPICAL 2 BEDROOM CORNER APARTMENT**

INTERNAL AREA: 77 SQM BALCONY: 12 SQM