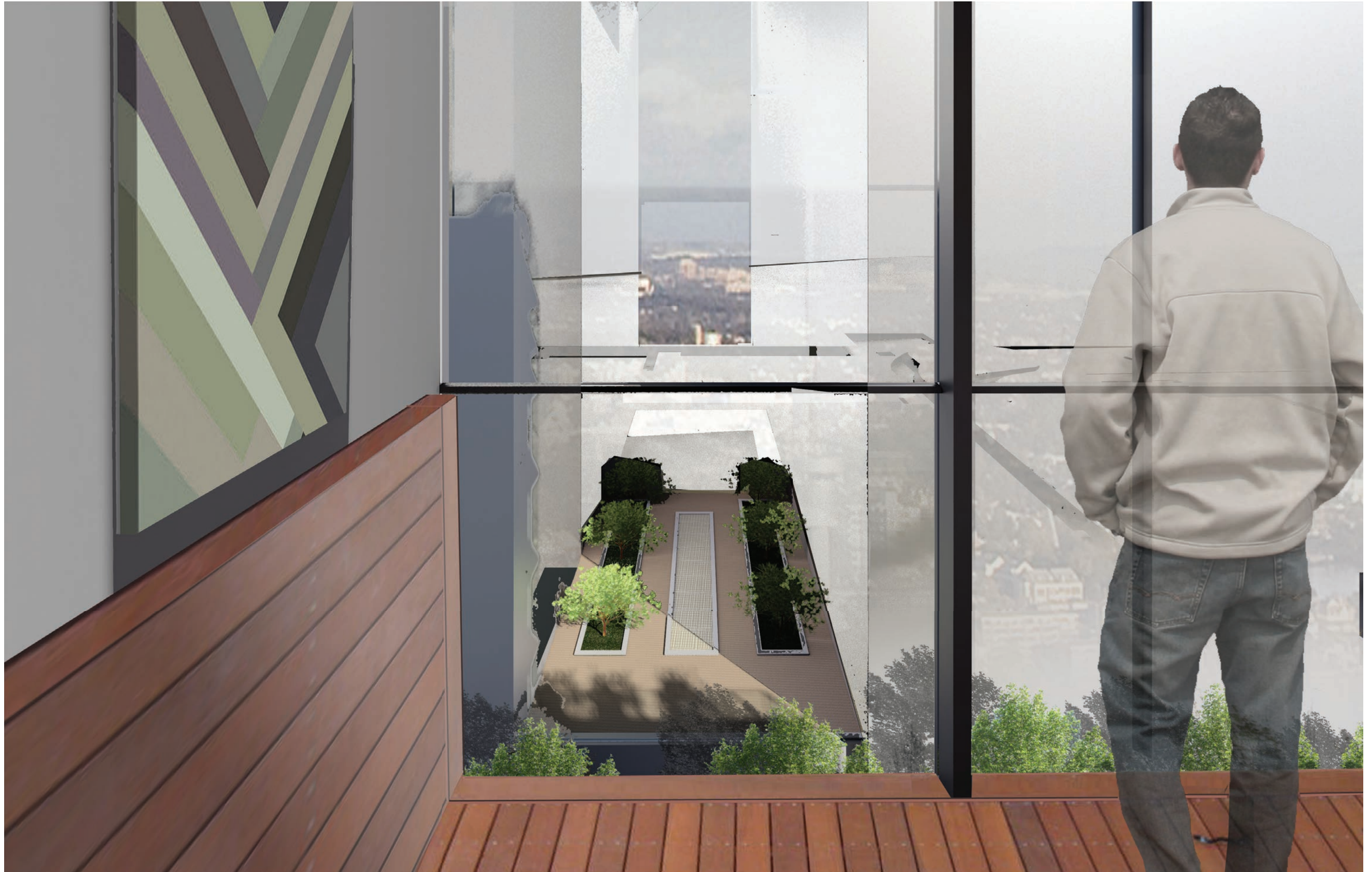
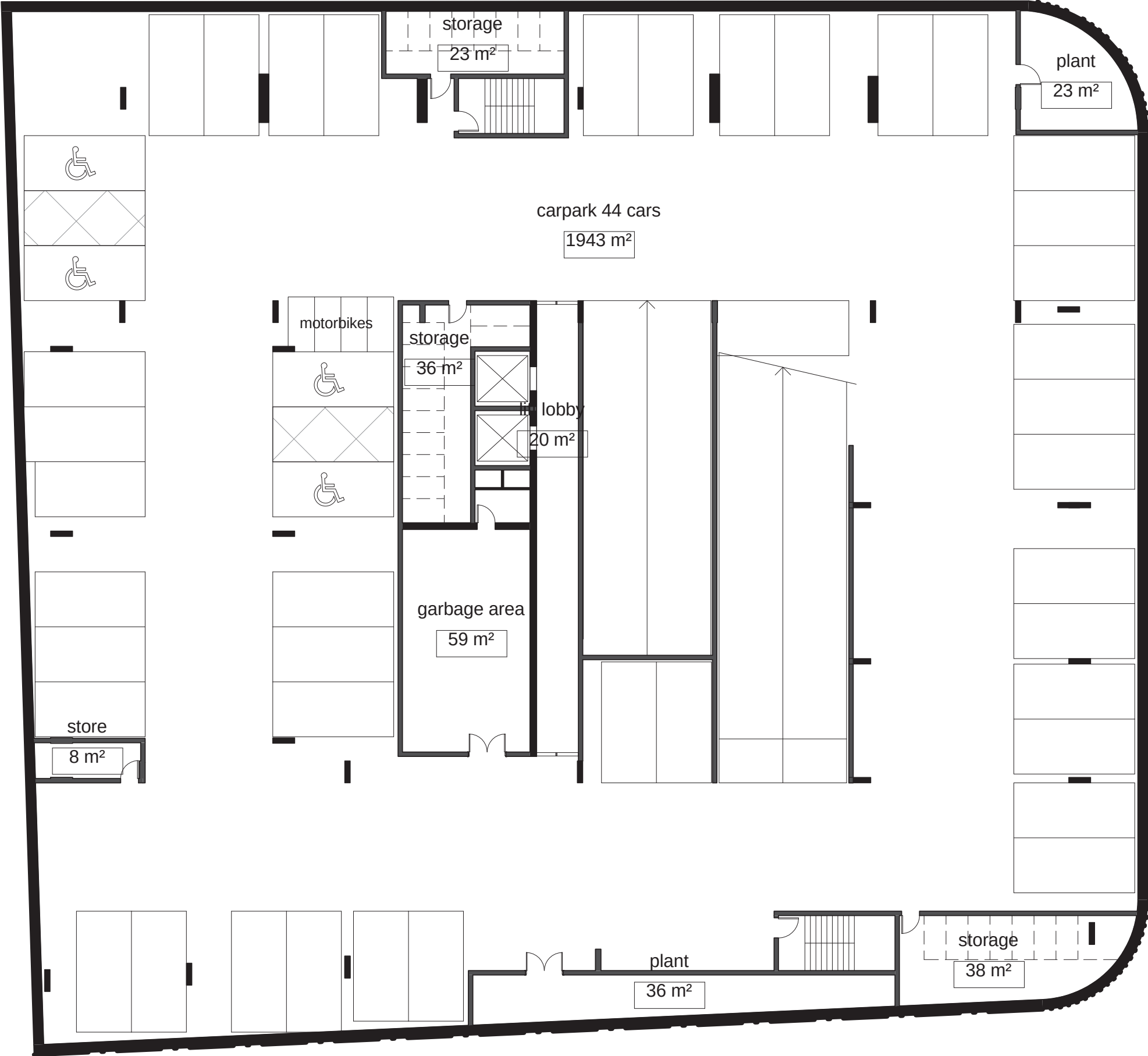
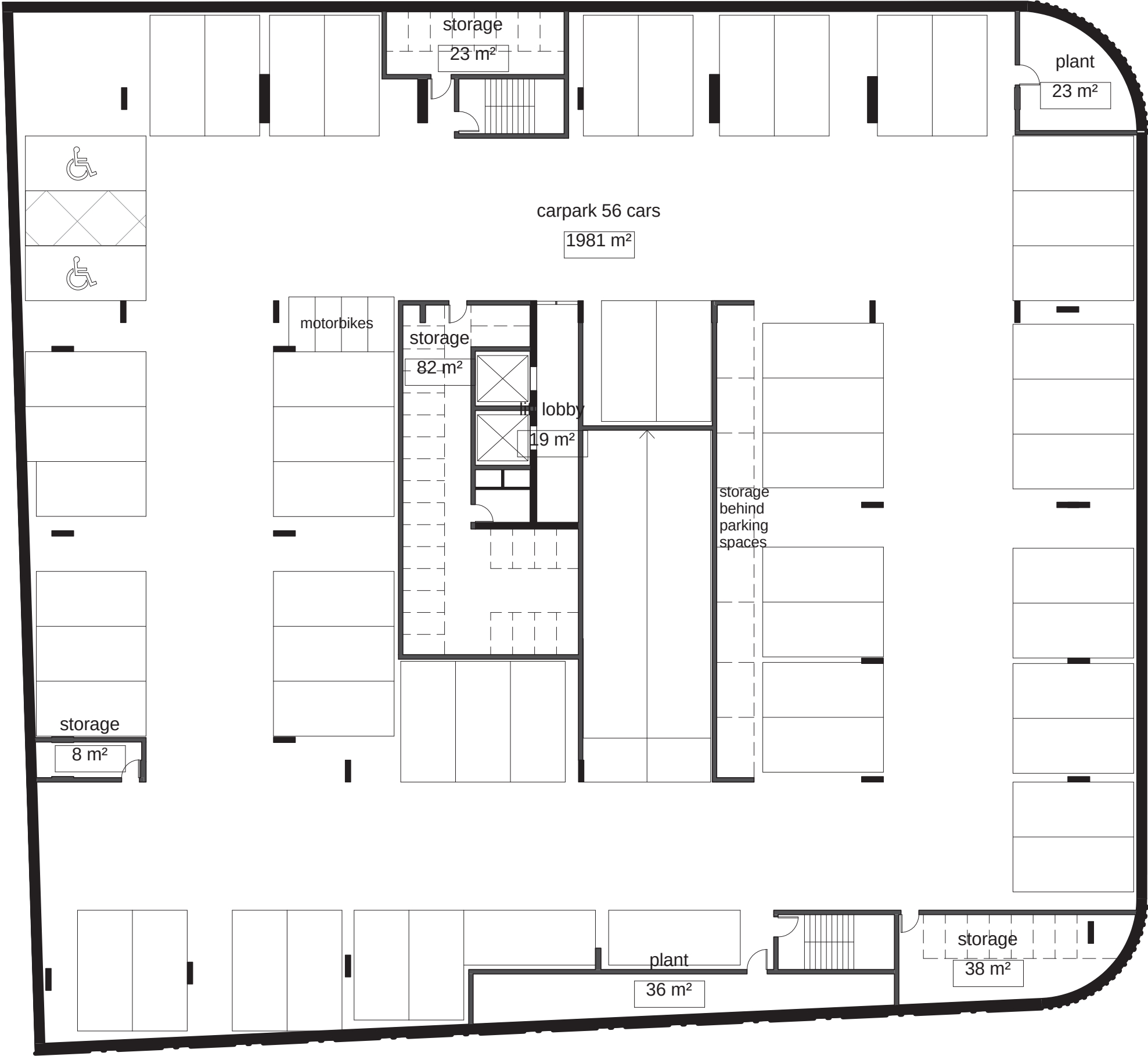




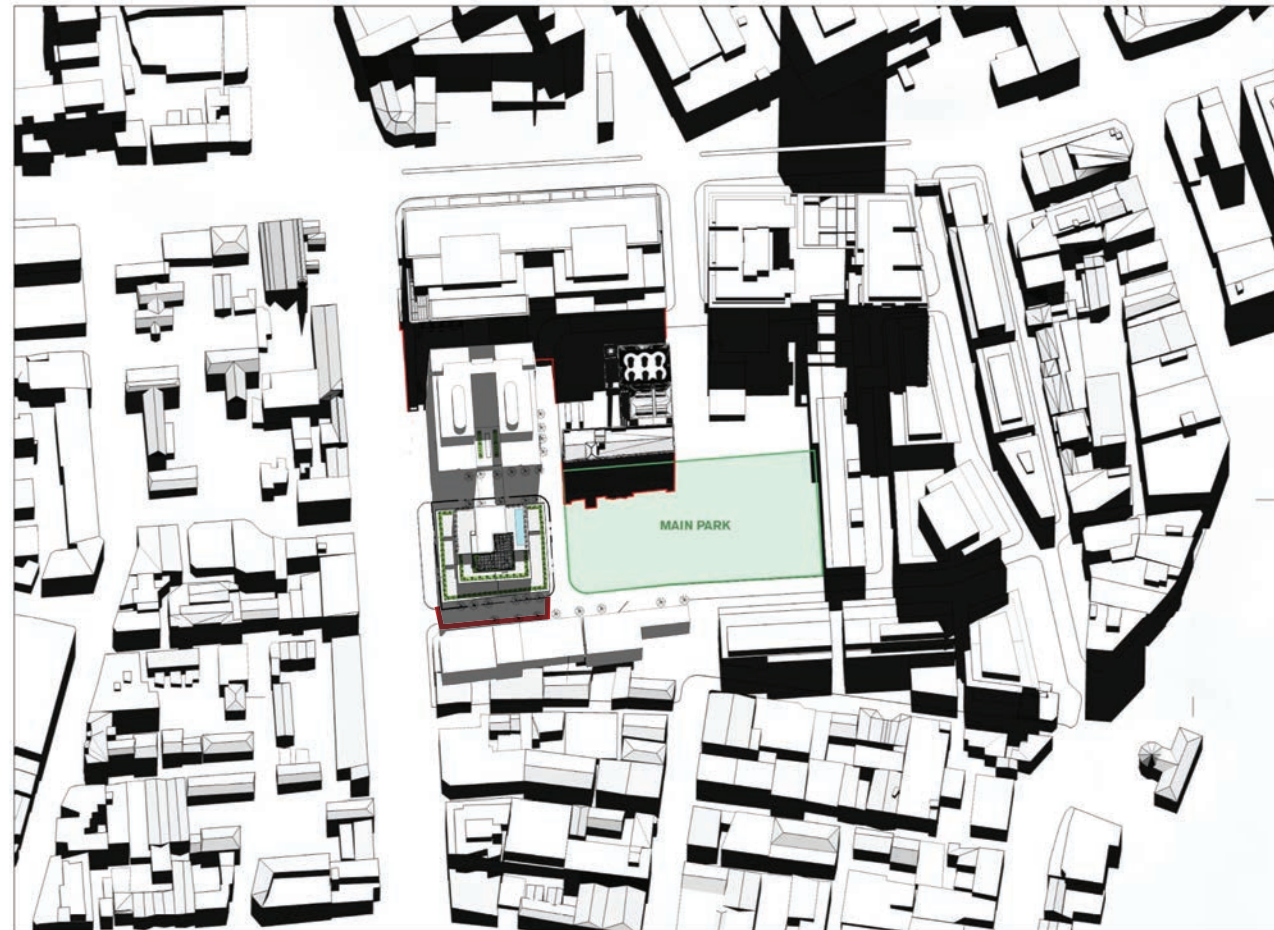


basement plans

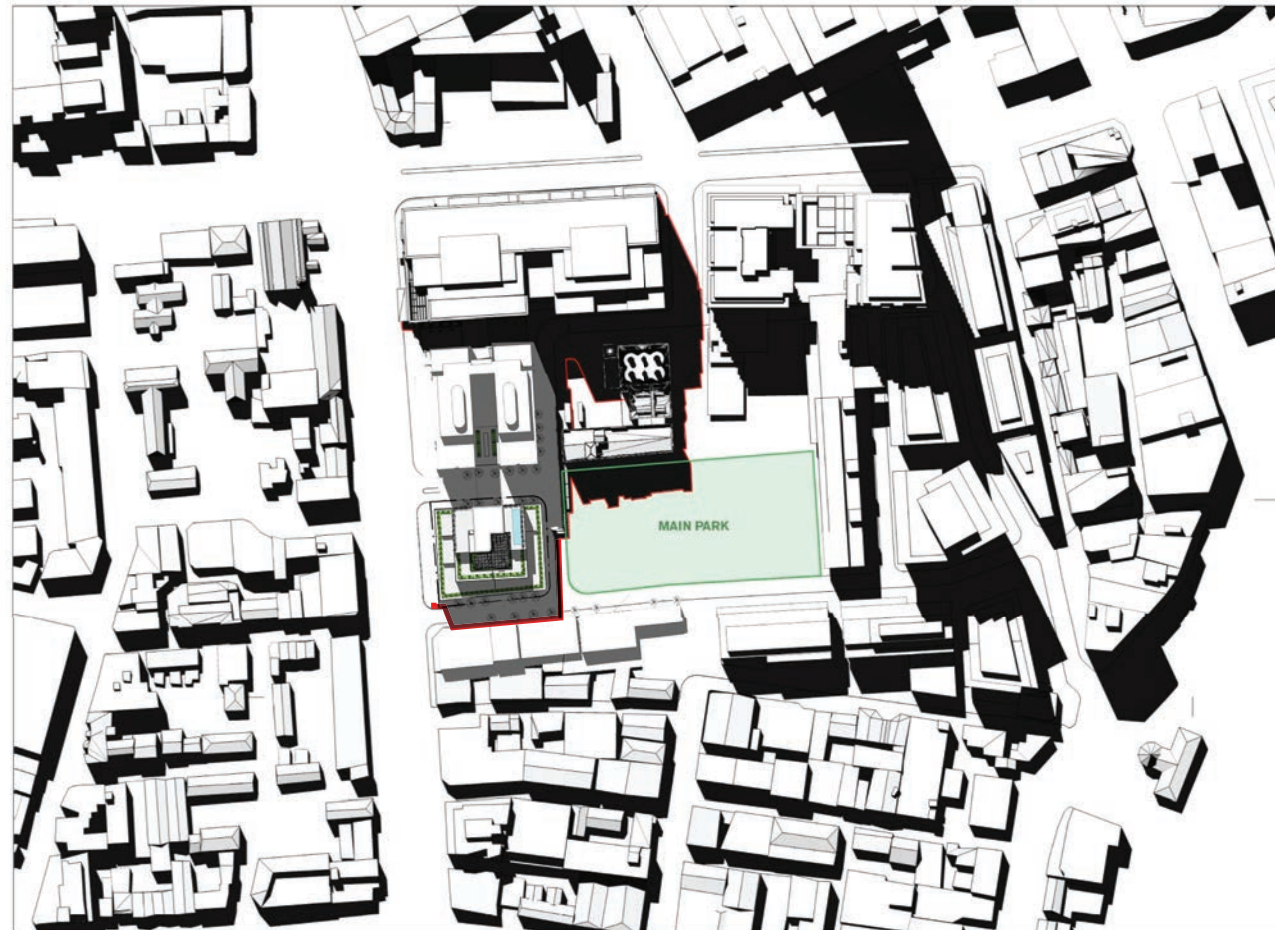




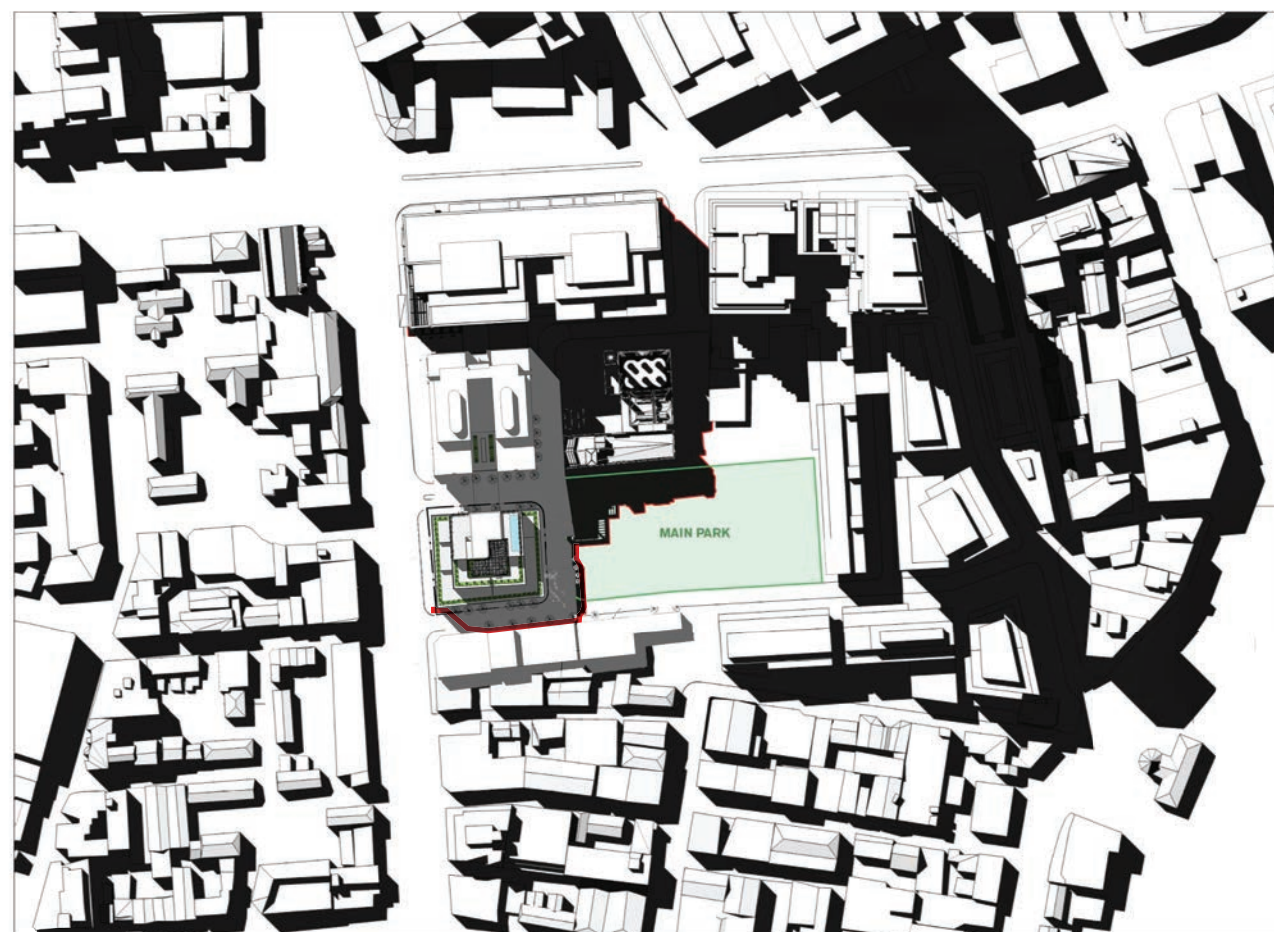
shadow diagrams



01 21 March
12pm



02 21 March
1pm



03 21 March
2pm

— outline of Foster's proposed
Block 8 shadow

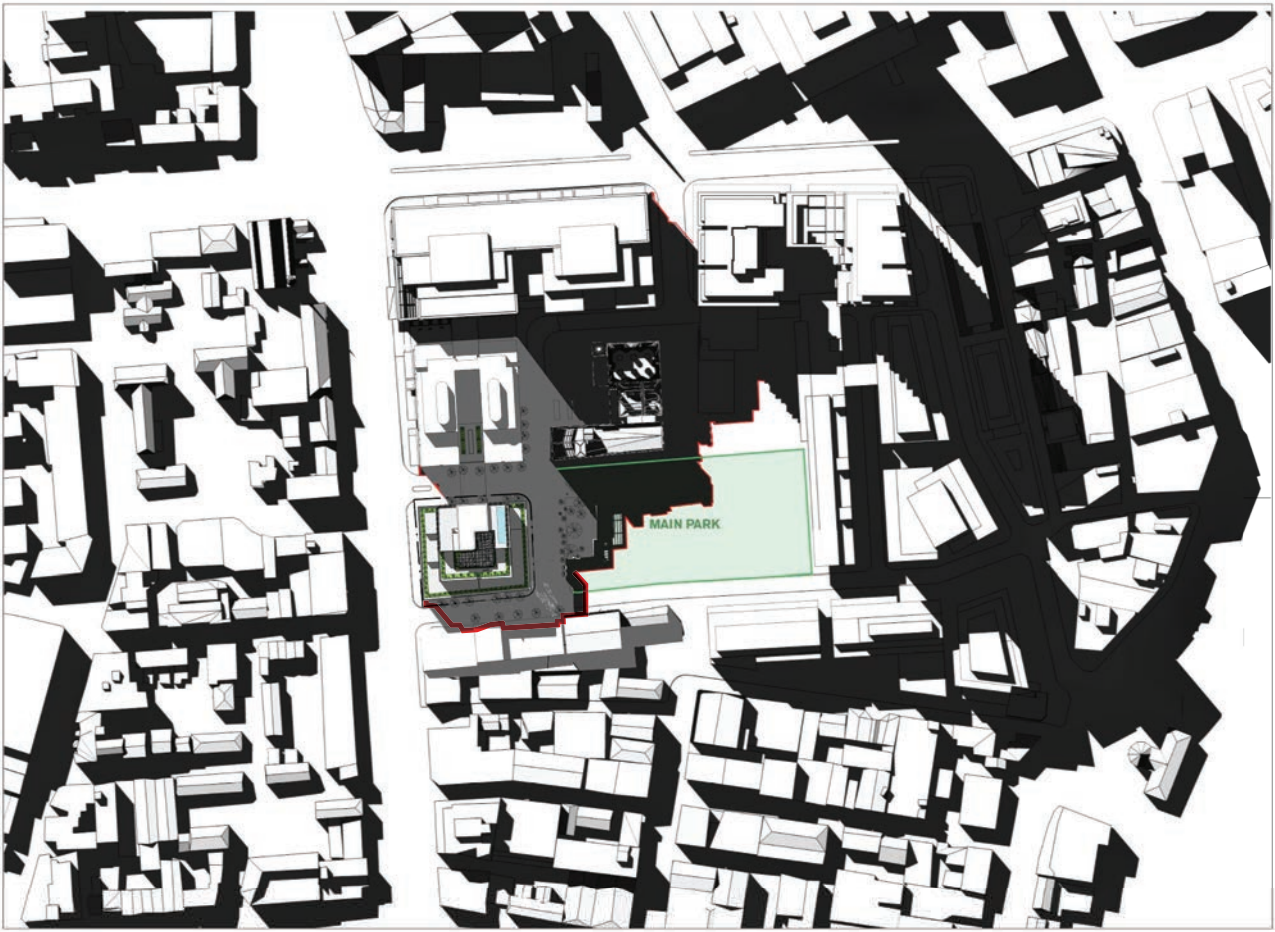
shadow studies 1



01 14 April
12pm



02 14 April
1pm



03 14 April
2pm

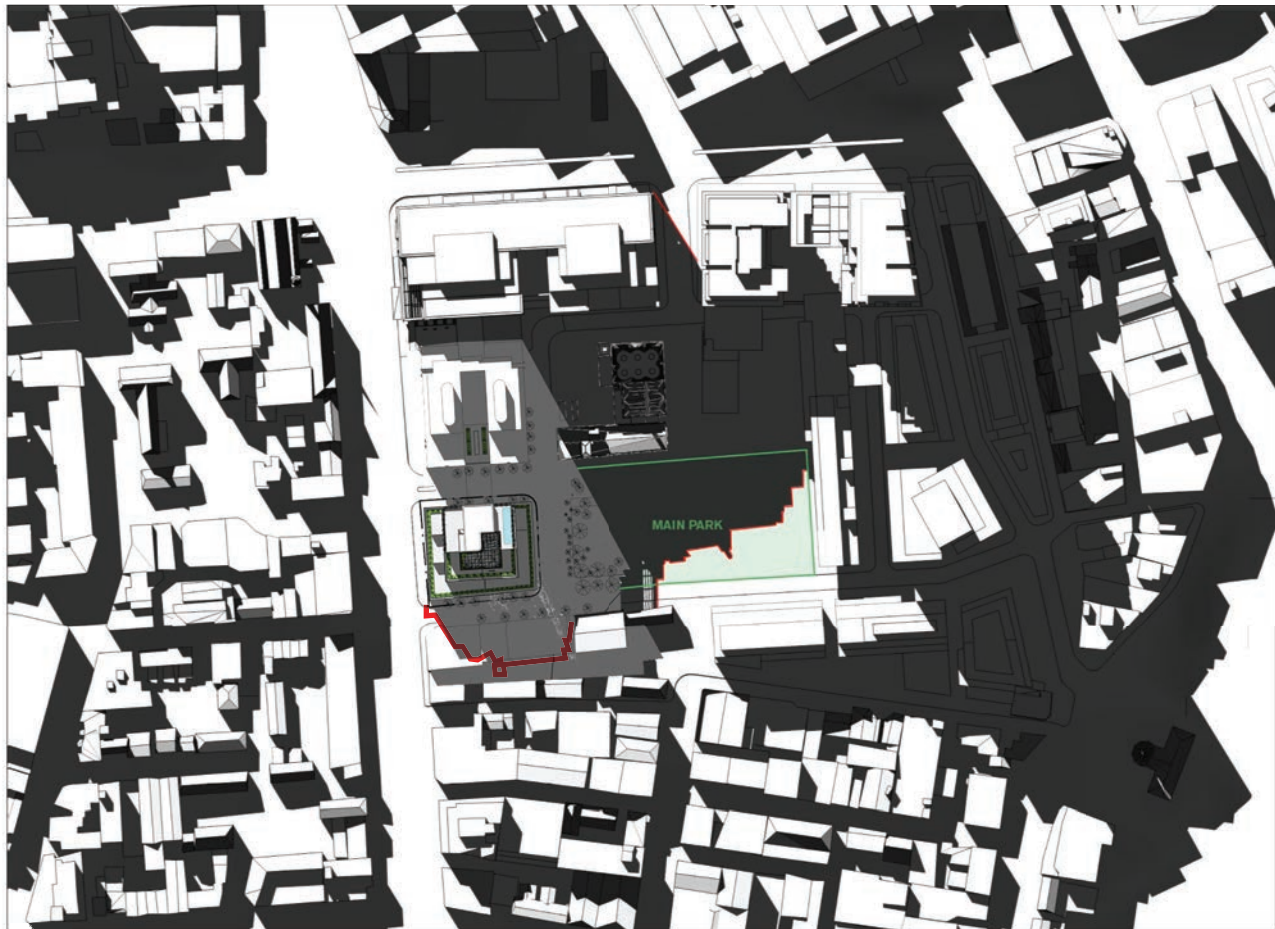
outline of Foster's proposed
Block 8 shadow



01 21 June 12pm



02 21 June 1pm



03 21 June 3pm

outline of Foster's proposed
Block 8 shadow

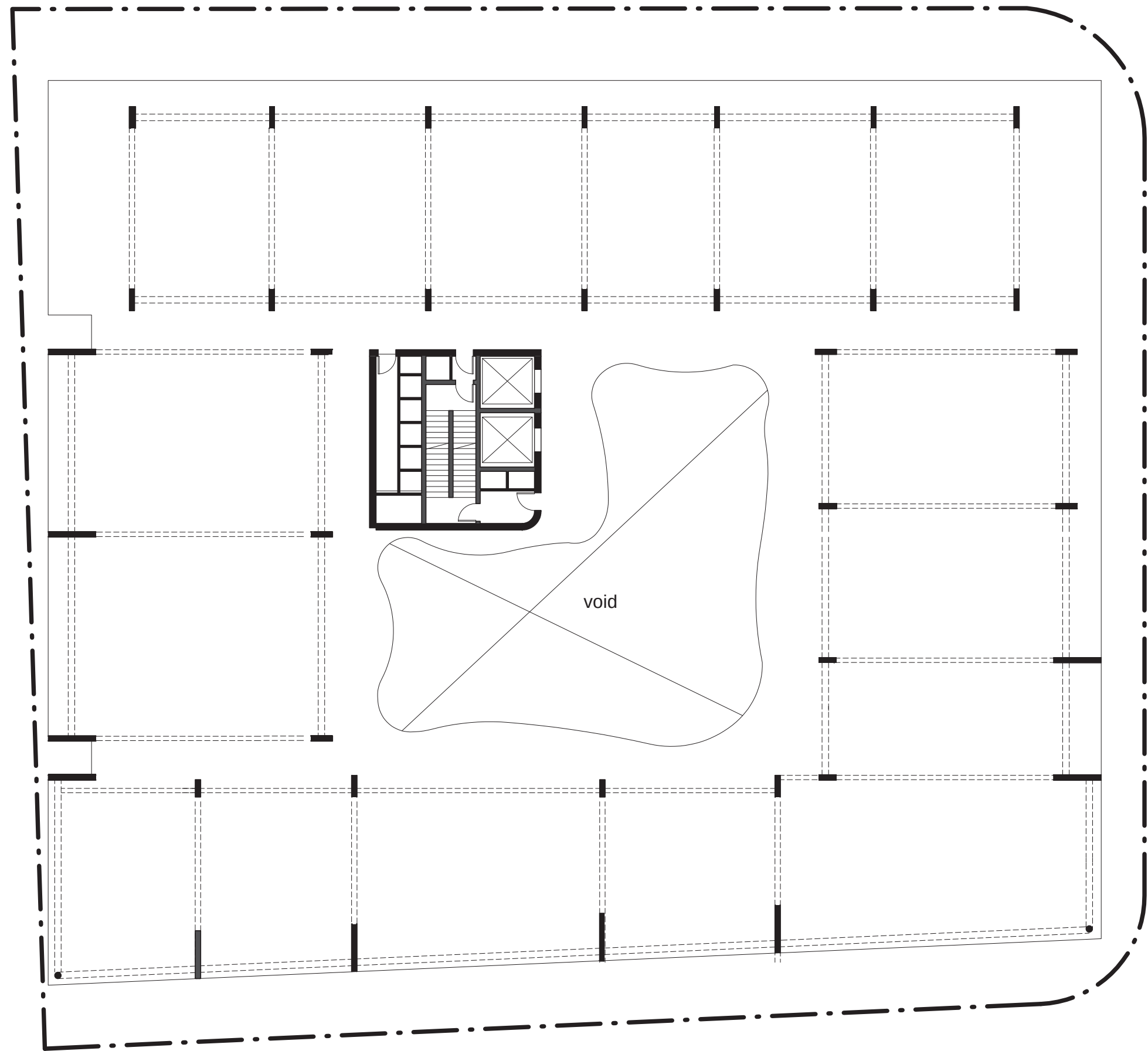
nt nettletontribe nettleton tribe partnership pty ltd ABN 58 161 683 122 117 willoughby road crows nest nsw 2065 t 02 9431 6431 f 02 9439 7474 e sydney@nettletontribe.com.au w nettletontribe.com.au																	
Central Park Block 8																	
SITE AREA		=	2437		m²		(approximate)										
MAX FSR		=	N/A		:1												
MAX GFA		=	14500		m²												

technical aspects

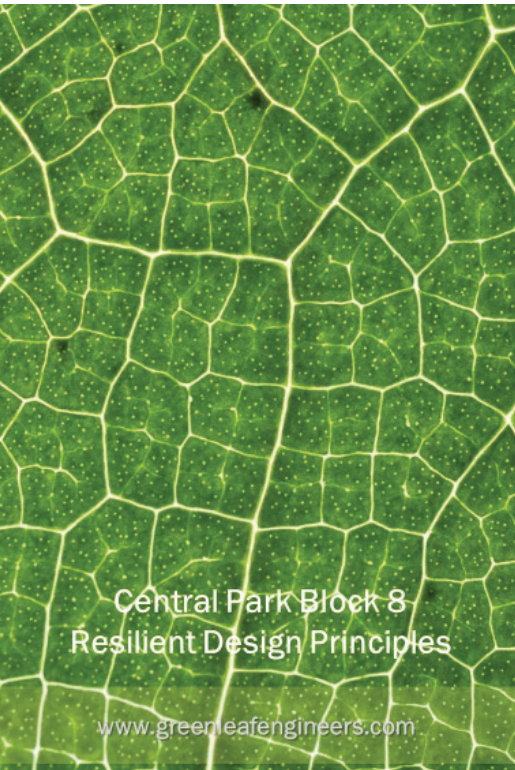
structure

Structural system of this scheme is simple and rigid. It's based on the concrete frame structure which consists of three main zones which are north, west and south-east areas surrounding the central atrium. The columns are placed at reasonable distances and are going through all the levels except for a couple of transfer points which happen below ground level.

The structural framing is tied to the structural walls of the core and is making the whole building stable.



structural framing concept



Resilience

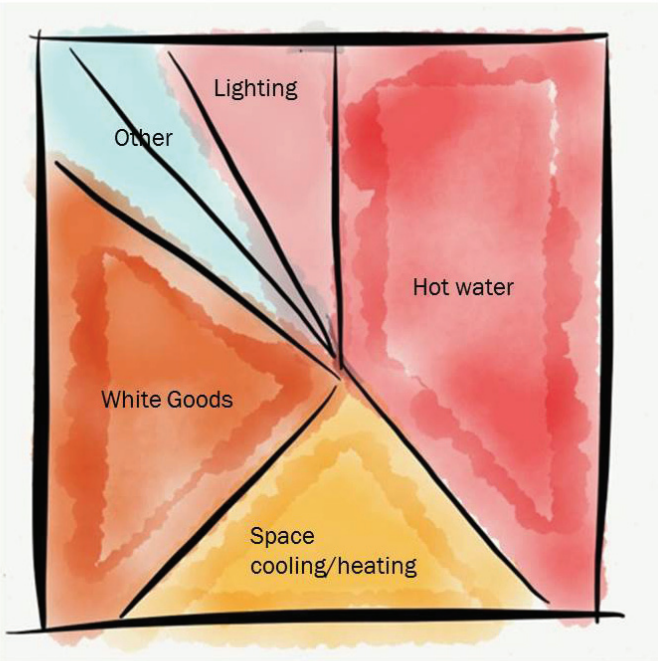
The design teams vision for this project was to maximise passive design features to a achieve a building that is resilient against;

- The effects of climate change
- Future energy price increases
- Ongoing facility maintenance costs

The process began by identifying the major energy centers within the concept and work hard to reduce these by passive or active design features. Once this process had been exhausted to then utilise onsite renewable energy systems.

Hot Water :	35%
White Goods:	34%
Heating/Cooling:	18%
Lighting:	6%

We have also considered harnessing the natural design features of the architecture to contribute not only to offsetting the utility bills (after passive design has been exhausted) but smoothing through a process of peak lopping to achieve smaller peak plant loads



Hot water

The generation of hot water in a large residential development is a considerable energy consumer.

Fuel source selection:
Gas fired hot water produces a significantly lower carbon consumption rate than mains electricity, however gas fired hot water tends to warrant a central system where system heat losses become very important. Early optimisation of these energy considerations tends to gas fired plant at roof level.

Peak Lopping:
Residential daily usage profiles are unique and generally very 'peaky' during early morning and late evening. Spreading this peak load through the use of thermal storage will be implemented to reduce plant size, and fuel costs.

Solar Thermal:
Evacuated thermal collectors will collect and store daily solar gains at roof level for use in the evening peak

Integrated façade solar collectors will be utilised on the east and west facades providing useful shading for cooling reduction.

Low grade heating capture:
Recover the heating energy from drainage pipes heating incoming cold water to mixer taps.

Cooling + Heating

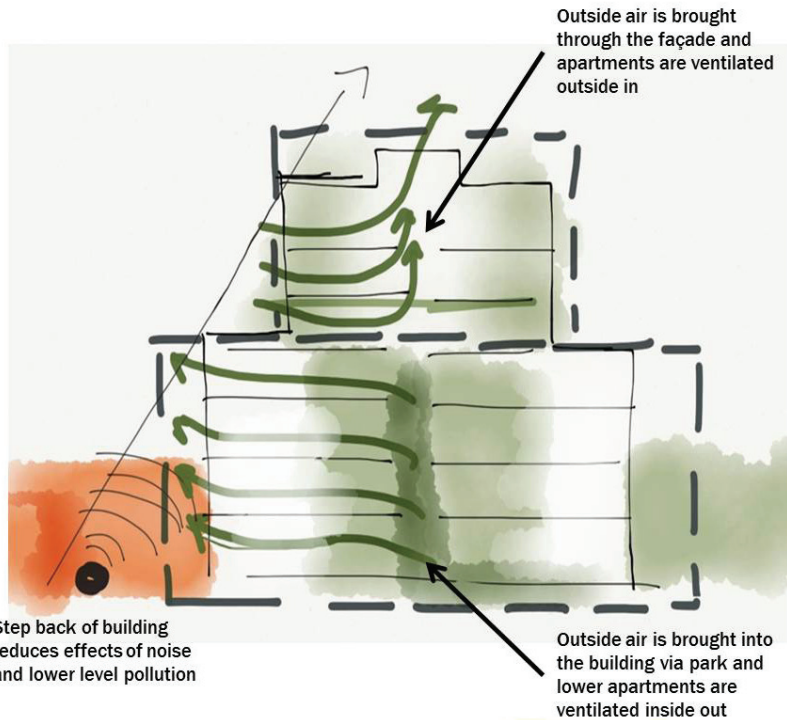
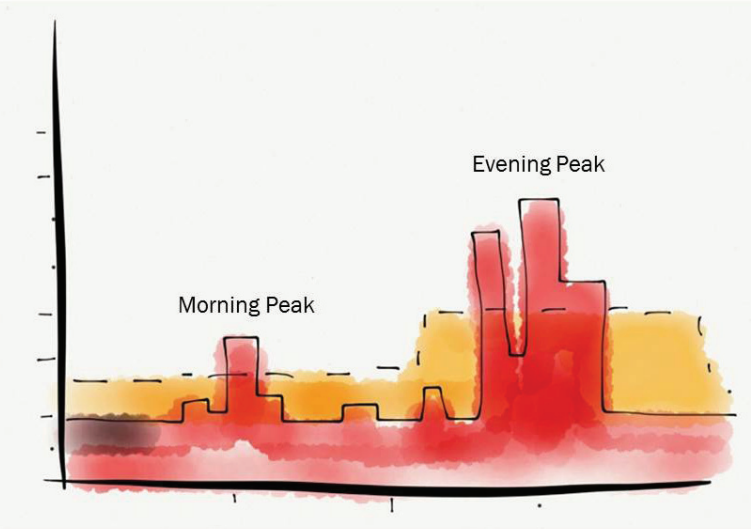
All apartments are required to work in three modes; natural ventilation, heating and cooling.

Natural Ventilation:
The object is to encourage through achieving comfortable conditions within the living spaces a decreased reliance on mechanical conditioning and therefore extending the periods where occupants will use natural ventilation. Noise, pollution, privacy and thermal comfort are factors.

Utilising the buildings step backs and access to openings oriented towards the park higher quality air can be made available to levels 1-6.

Exposed mass soffits and appropriate solar exposure will be designed into the fabric of the building.

Site wide cooling and heating strategies already in place at the site will be utilised to provide space conditioning via ducted fan coil units and heat recovery ventilators.



compliance table 1

Concept Plan Compliance Schedule			
Concept Plan Control	Proposed Design	Compliance	Comment
Max GFA (m2) Residential 13,500 Commercial 1,000	Residential 13,244m2 Commercial 473m2	Yes	
Public Domain Areas 11 + 3	As per Concept Plan	Yes	
Driveway Access and Parking to Irving St	Driveway access Parking	Yes No	2 x street parking spaces lost due to driveway ramp position
Awnings and balconies zones	Ground floor Upper levels	No Yes	Build out to max. envelope to increase GFA. Introduce awning over footpath
Max (EH) Height (AHD) 57.50 8.1 = 53.50 8.2 = 37.50 8.3 = 37.50 8.4 = 47.10	Max (EH) Height (AHD) 55.60 8.1 = 52.30 8.2 = 36.80 8.3 = 36.80 8.4 = 46.10	Yes	Residential floor heights have been reduced to 3.1m to allow rooftop common area within maximum building height
Typical Basement Levels B1 + 7.50 B2 + 2.00 B3 - 1.45	B1 + 9.00 B2 + 6.00 B3 N/A	No	Basement levels raised to reduce excavation
Indicative ground floor landuse Abercrombie Street - Retail Carlton Street - Residential	Abercrombie Street - Residential Carlton St - Retail	No No	Concerned about commercial viability of retail to Abercrombie Street. Retail to Central Park Ave will activate park edge.
Indicative typical floor landuse Residential and balcony / façade zone	As per Concept Plan	Yes	
RFDC distances between buildings	As per Concept Plan	Yes	
Overshadowing	As per Concept Plan	Yes	
Massing	Generally as per Concept Plan. Infill cutout to south for levels G-6th floor	Yes	No adverse overshadowing impacts. Increase GFA. Within maximum building envelope

compliance table 2

Compliance with Developers Expectations			
Expectation	Proposed Design	Compliance	Comments
URBAN DESIGN			
Ensure the form and external appearance makes a positive contribution to the quality and amenity of the public domain	Form as per Concept Plan. External glazed building character reinforces the existing quality of public domain	Yes	
Recognise and enhance the qualities of the site through building form and urban landscape	Form and scale as per Concept Plan. Building character sympathetic to urban landscape of precinct.	Yes	
Improve pedestrian connections	Active corners and retail frontages promotes pedestrian connections through the site via Central Park Ave and O'Connor St	Yes	
ARCHITECTURAL			
Realise a quality architectural, urban design and technical solution within the allocated budget	Simple and elegant architectural solution allows money to be spent on feature elements (atrium, loggias, sky village) to enhance overall design solution	Yes	
Efficiency, flexibility and functionality to facilitate maximum amenity to the apartments	Central atrium space facilitates maximum amenity to the apartments and allows maximum number of apartments with external frontage	Yes	
Respond to context and provide interaction with public spaces through active uses, appropriate proportions and interplay of building elements and materials	Active retail frontage to address Central Park. Active frontages to other corners.	Yes	
	Visual extension of Central Park into the building via "green" sky villages. Subtle interplay of building elements such as balconies and loggias to provide texture to the facade.	Yes	
Interface with surrounding precinct	Ground floor uses and façade treatments vary to respond to different surrounding precinct interfaces.	Yes	

compliance table 3

Compliance with Developers Design Goals			
Goal	Proposed Design	Compliance	Comments
SEPP 65			
2 hours - 3 hours solar access - 70%	80-90%	Yes	Subject to final apartment design
Cross ventilation - 60%	70-80%	Yes	Subject to final apartment design
8m apartment depth	8m - 13m	Generally, Yes	Deeper apartments acceptable due to high level of amenity
Max 10% south facing single aspect	11%	No	This does not take into account apartments which also face into atrium
Apartment sizes (m2) Int / Ext Studio: 40 - 42 / 6 1 bed: 50-55 / 6 1 bed + study: 55-60 / 6 2 bed: 75-80 / 9 2 bed 2 key: 85-95 / 9 3 bed +: 110-130 / 15	Studio: 43 / 8 1 bed: 50-57 / 7 1 bed + study: 54-61 / 7 2 bed: 81 / 7 2 bed 2 key: 87 / 11 3 bed +: 117 / 13	Yes	
Most valuable apartments to front main Park. Least valuable apartments to Abercrombie Street	Generally 2 - 3 bed apartments facing park, studios facing Abercrombie St		
Basement carparking in accordance with Council LEP. No car spaces to studio and 1 bed apartments. Rates	97 cars required 100 cars provided	Yes	
Substation to basement or ground floor	Ground floor	Yes	
Retail to have maximum exposure to foot traffic through the site via Central Park Ave	Retail located along Central Park Ave	Yes	
Residential entry should be off Central Park Ave	Residential entry / address off Central Park Ave	Yes	
Identify benchmark building	Triptych (Melbounre)		
Apartment design innovation	Front gate and screened vesitbule Sky villages Central atrium	Yes	
Kitchen to have full height integrated fridges and 1,800mm benchtops for studios and 2,400mm for 1 bed	Incorporated	Yes	
2.7m ceiling heights to living and bedrooms	2.7m ceilings	Yes	