DESIGN COMPETITION

BLOCK 8
FRASERS BROADWAY

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Tony Caro Architecture Pty Ltd
ABN 90 074 453 302
Level 1, 2 Glen Street Milsons Point,
NSW 2061 Sydney Australia
P +61 2 9964 9100 | F +61 2 9964 9133
tony@tonycaroarchitecture.com.au
www.tonycaroarchitecture.com.au
Architects Registration Number: 4578

TONYCAROARCHITECTURE

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1.0 PROJECT VISION AND OBJECTIVES

This Design Statement describes the Design Excellence Competition Concept Design prepared by TCA for Block 8 Central Park of the Frasers Property Broadway development. This exciting new precinct is being created on the former CUB site at the western threshold to the Sydney CBD.

The proposed Concept Design responds to the key planning, commercial, and design objectives applying to the development, as established in the Design Competition Brief.

Key project objectives that TCA have considered in this Concept Design are:

• To complement and contribute to the transformation of this industrial site into a dynamic, sustainable mixed-use community on the edge of the City.

• To integrate the site with its existing and proposed public domain structure and provide a well-scaled, active street interface.

• To complement and integrate new built form with existing and proposed development.

• To consider broader scale potential and benefits of public connectivity through the site.

• To create an architecturally distinctive, well-scaled and high quality built form proposal for this residential typology.

• To provide a mix of apartment types and sizes that will encourage a wide demographic band of residents.

• To ensure that apartment design achieves design excellence in terms of urban design, efficient planning, residential amenity and environmental sustainability.

• To ensure that the key Brief targets for GFA/NLA and apartment yield, type and mix, are achieved within an over-arching framework of high-quality, sustainable design.

• To use a variety of high quality, sustainable, low maintenance and cost effective materials, particularly where visible from the public domain.

• To integrate car-parking and vehicular access in an unobtrusive manner.

• To provide a design concept that will deliver cost-effectiveness through efficient floor planning, continuity of building structure, and a rational approach to construction systems, cladding and material selections.

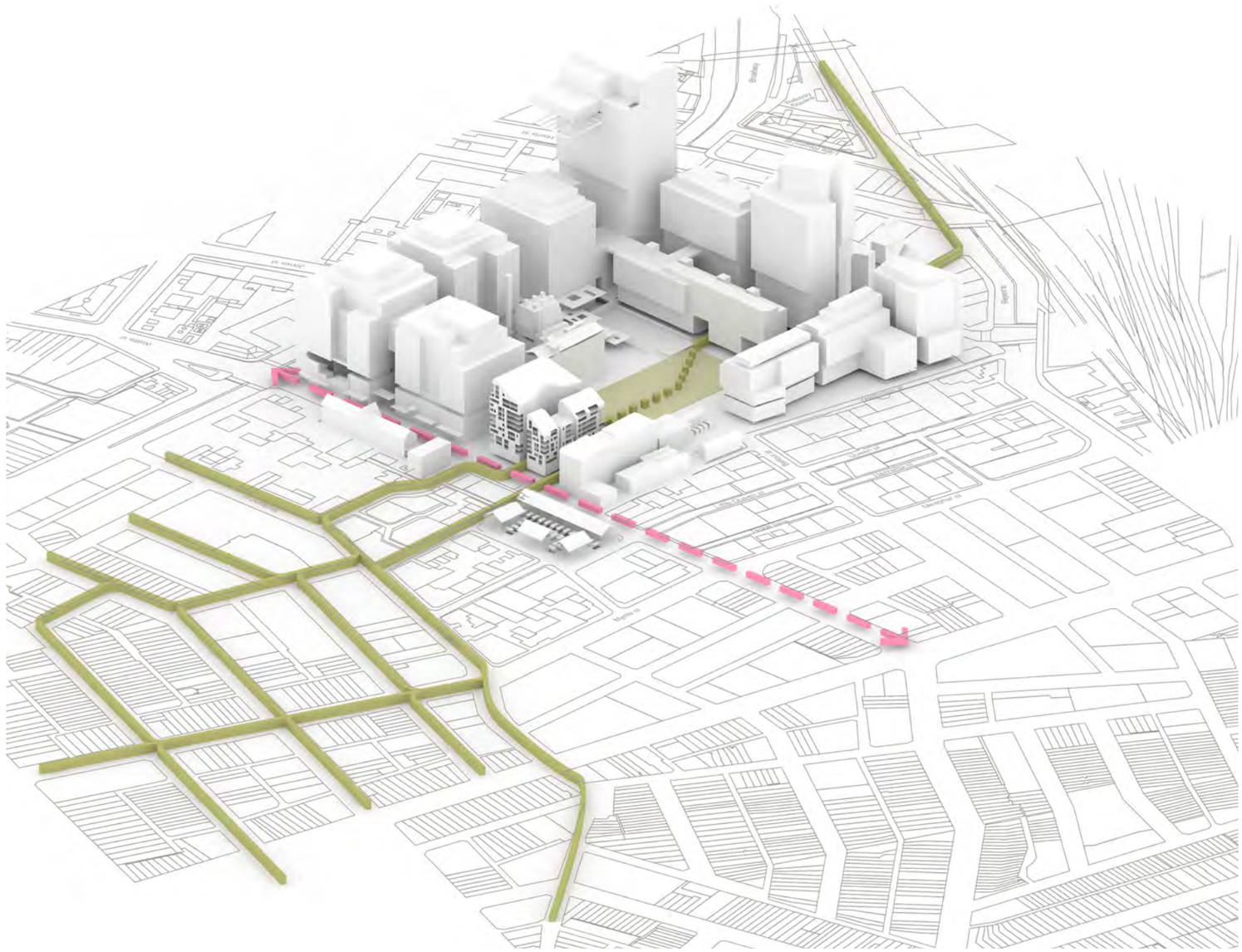
2.0 SITE CONTEXT

The site is located on the south-west corner of the CUB site, on the corner of Abercrombie and O'Connor Streets. The public domain plan for the CUB redevelopment creates new streets to the north and east, resulting in the Block 8 development being a new, free-standing building with frontages to markedly diverse orientations and urban contexts.

Of particular note is its eastern address across Carlton Street to the new Central Park, and its frontage to Abercrombie Street with exposure to afternoon sun and an intense traffic environment.

The CUB site is in the midst of a changing, rapidly emerging new precinct and place. To the north, a dense commercial mixed-use precinct is now being transformed by UTS into an exciting, inner-city education-based campus. To the immediate west and south lies historic Chippendale, a vibrant, inner-city suburb with a rich mix of traditional residential and light industrial buildings being adapted to new uses. It is presently isolated from the CUB site by the high Abercrombie Street traffic volumes.

Transition and integration with this inner-city fine grain to the south and west, as well as with the much denser and taller development to the immediate north is a key urban design consideration for the Central Park Block 8 site.



3.0 THE CONCEPT DESIGN - KEY IDEAS

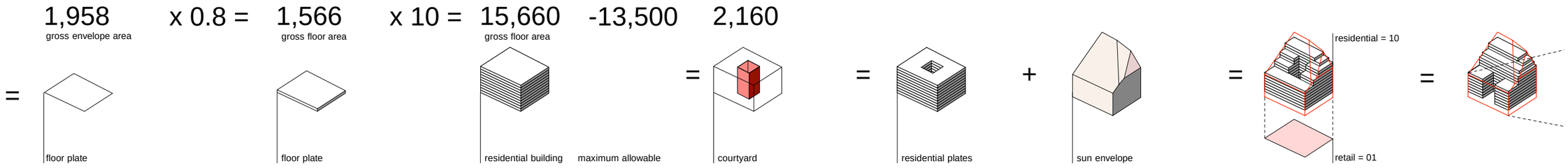
TCA have devised a conceptual design strategy that creates a distinctive architecture reconciled with the commercial brief targets and an interpretation of the building envelope constraints.

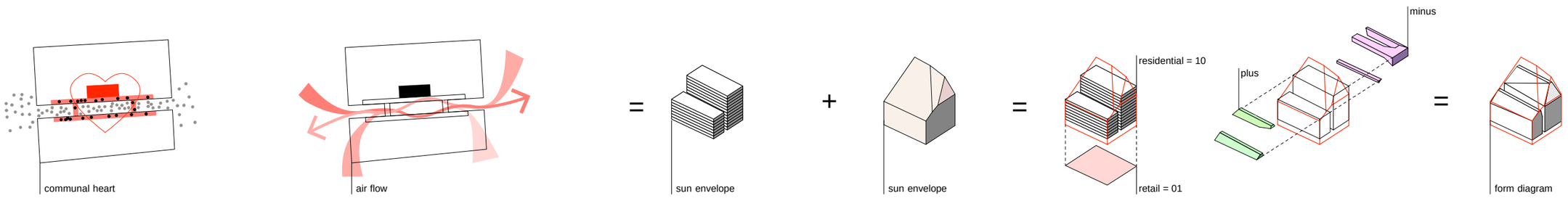
We felt that the envelope as currently described - an inherently boxy, squat form with a smaller box mounted axially on top – creates a kind of formalised, “wedding-cake” architecture as opposed to a more visually arresting and contemporary idea of slender forms arranged to gain access to natural light, air and permeability.

We therefore decided to interrogate the envelope; to understand the principles that informed it and if changes were to be considered then they would need to ensure that these principles remained intact. The primary intentions of the building envelope appear to be threefold:

- to build the edges of the building to the boundaries, that is to create street-defining built form,
- to ensure a defined level of solar access to existing development to the south and new parklands to the west,
- to provide a transition in the scale of built form, descending from higher and bulkier in the north towards the lower and more finely grained existing development to the south.

The latter two intentions are prescribed in the controls by solar access planes and façade setbacks. We therefore felt that if we constrained all new built form to within the solar planes and developed a reasoned architectural strategy for scale transition, we could make a good argument for variation to the envelope provided improved public domain and residential amenity outcomes could be demonstrated.





3.0 THE CONCEPT DESIGN - KEY IDEAS

This approach has resulted in a quite different built form concept. Instead of a 7-storey “box” to the entire Abercrombie Street frontage with a secondary setback above, the design proposition is to split the building envelope east to west, into two distinct forms of 12 and 8/9 residential levels. This creates a vertical slot or chasm through the building, dramatically revealing the common circulation elements located centrally within the plan. Importantly, it also articulates the building form into two parallel elements that suggest both residential typology and the possibility of public movement between the street and the new Park.

This passage within the building is a kind of hybrid, multi-valent space. It is essentially public and open 24/7 at ground level for building and retail access, but is also the organising spatial element at each level of the building.

The primary core containing lifts, services and fire stairs is located in the taller northern form, with bridges at each of the lower eight levels providing access to apartments in the lower southern form. Part of the roof of this lower piece is planned for residents communal open space and activities.

The building is cleaved to comply with the solar planes as they slice through its basic prismatic volume. This creates a sculptural expressiveness at the upper levels and is amplified by the weaving vertical surfaces of the passage cut through the building to the Park.

An expressive approach to surface and materiality will re-inforce the basic architectural parti of the building. The street facades are planar, taut metallic skins punctuated by a lively pattern of openings to windows and terraces.

The passage is treated differently: it has more complex surfaces of solid and void, open to the sky but punctuated by bridges. Strong colour is proposed to accentuate its arterial, almost visceral function at the heart of the building.

We also felt that this building and site would be suited to an alternative approach to the customary handling of the built form to ground plane relationship – that it did not need to bond resolutely with the city floor at the boundary, but rather that its primary forms could float over the gently sloping terrain tracing the sites natural topography, thereby inviting public access into and through the site.

This strategy opens up vistas and creates a stronger sense of connection between Chippendale and the new Central Park. It is a welcoming gesture to the existing community to the west, instead of presenting the Abercrombie Street face of the building as a barrier.

4.0 RESPONSE TO PLANNING BRIEF

The planning controls for this site have evolved over time and are complex. We understand the primary planning instrument in relation to building envelope and floor space for the Block 8 site to be DoPI Modified Concept Plan Approval No. MP06_0171.

It is noted in the Design Brief that compliance with the Modifiied Concept Plan is required, unless AN ALTERNATE concept can be justified. The TCA Concept Design seeks to vary the building envelope on the basis of improved outcomes in urban and architectural design, whilst ensuring that the solar access required by the Modified Concept Plan envelope is preserved - refer to Section 3.0 of this Design Report and supporting diagrams.

The development must also comply with the statutory requirements of LEP2005 and SEPP65, and consider the objectives and requirements of the primary supporting controls being Sydney DCP1996, Sydney DCP2012, and the Residential Flat Design Code (RFDC). It is noted that Sydney DCP 2012 was gazetted four years after the key Master Plan Controls for the CUB site were established, and therefore detailed compliance should be considered in this context.

For the purposes of this competition we have referred to the "Preferred Project Report – Modification to Concept Plan", prepared by JBA Planning and dated October 2008, to understand the current planning context and constraints. This document supplies the following key requirements in relation to BLOCK 8:

- Total GFA of 14,500sqm with 13,500/1000sqm allocated for residential/commercial uses respectively.

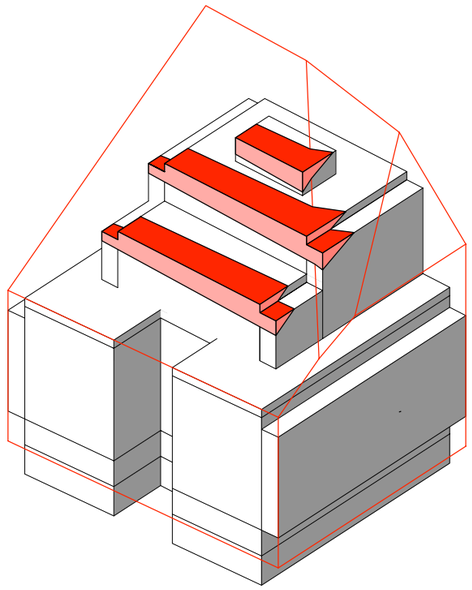
- Amendments to the approved envelope, including additional floor space being required to be fully contained within the solar height planes.

The Foster+Partners Appendix A Final Plans forming part of the approved Modification establish the revised Block 8 envelope and its underlying rationale. These documents have been analysed and interpreted in the TCA Concept Design, to ensure that the solar access provisions to the south (across O'Connor Street), to the east (the new Central Park), and to the west (across Abercrombie Street) are achieved, as follows:

• To the south and east the TCA Concept Design built form is fully constrained within the solar plane control (dwg SEPP-1002), to ensure the required solar access to O'Connor Street buildings and the new Park is achieved.

• To the west, a variation to the envelope is proposed along the northern portion of the Abercrombie Street frontage, where it is considered reasonable to build to the street alignment to the full envelope height whilst maintaining acceptable RFDC-based solar access to commercial buildings on the western side of the street. Importantly, this also reinforces the broader urban objective of stepped form from north to south.

• To the north the Concept Design follows the envelope alignment on the Irving Street frontage. This creates a building separation that complies with DCP1996 separation recommendations, but varies from the general RFDC Rule of Thumb (24m) for the upper four floors (Levels 9-12). This is considered acceptable, given that detailed envelopes have been formulated for the precinct and any visual privacy impacts able to be addressed in the detailed design of façade openings.



COMPARISON • SUN PLANE - APPROVED ENVELOPE

SEPP65 AND RFDC

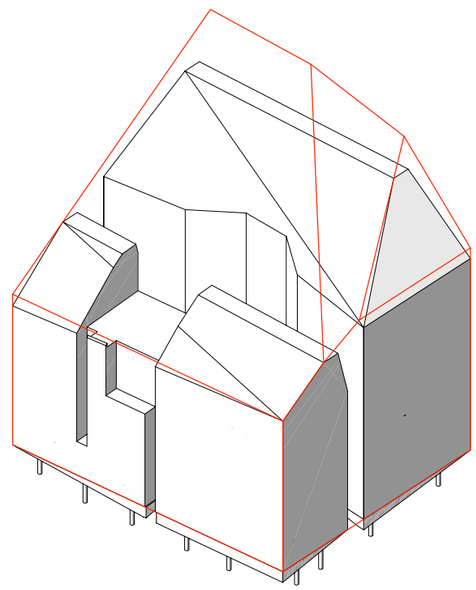
The Concept Design complies with the objectives and intent of SEPP65 and the RFDC, to ensure that it will meet the levels of residential amenity that are achievable on a site of this nature.

Challenges for this compliance include:

- minimising south-facing apartments

- provision of winter solar access to north facing apartments where higher development is located directly across the street.

- provision of natural ventilation on a square site with a high percentage of small apartments. The central passage through the site is important in addressing this: it is intended to cross ventilate single aspect apartments with fan-assisted "nostrils" across the common corridor to this central open air space.



COMPARISON • SUN PLANE - PROPOSED ENVELOPE

5.0 RESPONSE TO URBAN DESIGN BRIEF

The Brief urban design objectives require:

- that the form and appearance of the development make a positive contribution to the public domain.

- recognition of the sites qualities through the interaction of built form with landscape.

- improvement in pedestrian connectivity in and around the site.

The Concept Design responds to these objectives as follows:

- The TCA Concept Design offers an imaginative design response that integrates sound urban place-making principles with an innovative architectural proposition for this building typology.

- It addresses the sites context and constraints whilst creatively responding to its inherent opportunities, thereby making a positive contribution to the existing area and its anticipated future character.

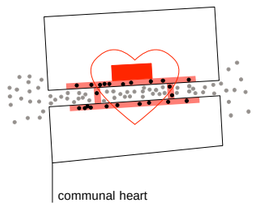
- Despite its relatively small size, the site has high levels of exposure to the rivers of traffic flowing one-way north along Abercrombie Street towards the City. This creates an opportunity for a distinctive and more dynamic urban presence as a kind of counter-point to the larger, more orthodox residential towers, heritage elements and public domain network of the CUB site. The proposed building is both sculptural and playful in its façade treatment. The street facades are all treated with the same aesthetic character, to imbue the building with a strong sense of formal unity. We feel that there is scope for this approach given the sites inner city character, with significantly taller buildings to the north creating relatively low exposure to solar or wind loading.

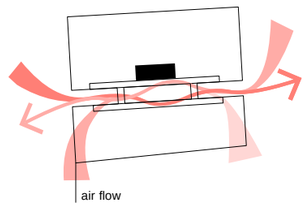
- The buildings urban expression hovers between object and frame. It is a free-standing form that mediates between the linear spatial character of a street, and the inherent centralised nature of a Park.

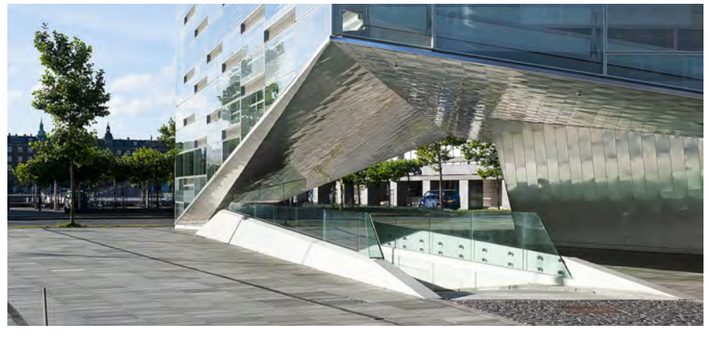
- At a broader scale, the built form proposition creates natural stepping in height between the taller forms to the north and east and the lower, finer-grained form of Chippendale to the south and west

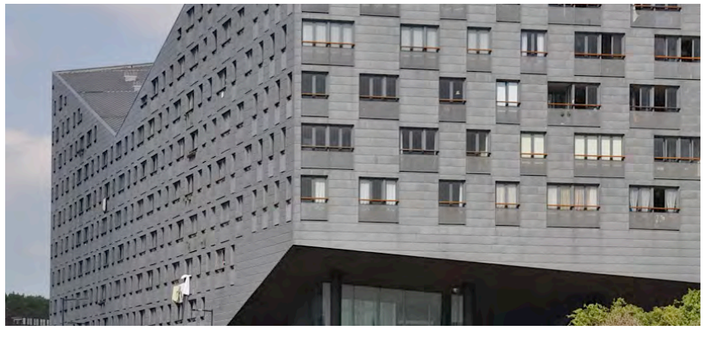
- By freeing up the ground plane, there is an outstanding public domain opportunity for increased pedestrian and visual permeability between Chippendale and the new Central Park. We think this is an important strategy that can balance the relentless north-south traffic flow with a new east-west movement for pedestrians and cyclists. A new pedestrian crossing should be considered in this location, connecting Blackfriars Street and filtering through to the new Park.

- The landscape proposition for this site is sourced in its topography. The site falls 3 metres diagonally from south-east to north-west. The ground surface would be stone and seamless with the footpaths, gently undulating and sculptured to respond to the ground floor program of lift lobbies, retail spaces and integrated vehicular access points. This strategy allows the public domain to be freely allocated across the site: an advantage is that the Abercrombie Street footpath width is readily widened to meet the VPA commitments.









6.0 RESPONSE TO ARCHITECTURE AND ENVIRONMENTAL BRIEF

The Brief for architecture and environment require:

- a quality design that recognizes the cost parameters for the project in the context of its location and market

- efficient and functional design to create optimised apartment amenity

- is a good fit with its existing and future context

- seek opportunities for progressive and high contemporary standards of design across all aspects of the project

- that the building can offer strong “green” credentials in its design development and execution

The Concept Design responds to these objectives as follows:

- The building is in a high exposure location and has a distinctive architectural presence that will ensure it is easily identified and memorable. It has a vibrant, contemporary character that we believe is appropriate to the location and market sectors identified in the Brief.

- We believe the project can be delivered within an efficient cost framework. The buildings structure is conventional and the plan compact. The core is central and efficient, with two lifts serving all levels. Generally there is continuity of apartment planning, structure and services through the building. Internal party walls could be flat structural precast concrete.

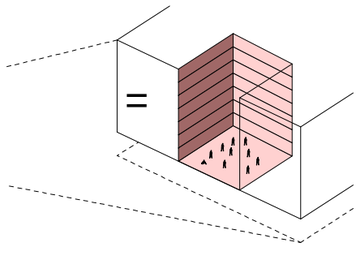
- The primary external facades are metallic skins, with a lively pattern of punched openings. We have a preference for standing seam or zinc cassettes for these facades, although other metal cladding systems can be considered.

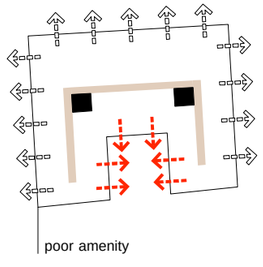
- The 2437sqm site is roughly square, creating design challenges for providing natural light and ventilation to all apartments at the density required by the Brief. The proposed Concept Design addresses this by creation of the central passage, bringing opportunities to introduce natural light, air and apartment ventilation deep within the plan.

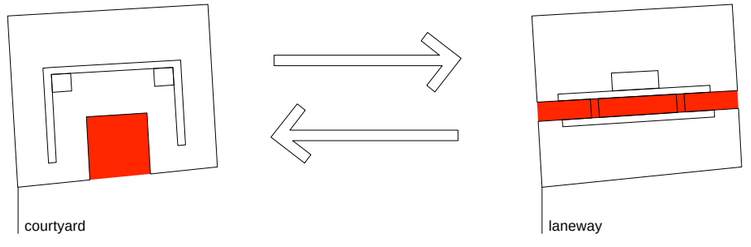
- The Concept Design provides a wide range of apartment types that share the fundamental, commercially requisite characteristics of well-proportioned, readily furnished rooms, compact but highly functional Kitchens and wet areas, and minimised internal corridors.

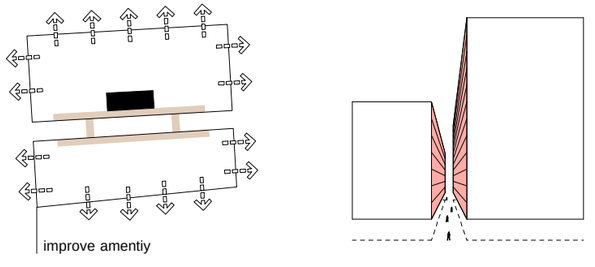
- Private outdoor spaces (loggias/terraces) are conceived as integrated living spaces – effectively apartment rooms with un-glazed openings. We feel this is a good response for this type of site, where protection from noise and creation of privacy and a sense of shelter are critical considerations.

- The Concept Design has the capacity to offer high standards of public domain and building environmental performance, through application of SEPP 65/RFDC, Multi-Unit Basix and a suite of sustainable public domain and landscape design strategies that could include storm-water and grey-water recycling, permeable pavements, rainwater cleansing and harvesting, solar domestic hot water, PV cell technology for communal lighting and the use of low embodied energy materials.









7.0 RESPONSE TO COMMERCIAL BRIEF

The Brief commercial objectives require:

- A minimum GFA of 12,500sqm, with a maximum target of 14,500sqm.

- Maximisation of net saleable area through internal efficiency

- High standards of residential amenity, to meet contemporary standards and expectations.

- Compliance with Frasers briefed apartment mix and areas.

- A design and construction framework that can deliver a cost effective, commercially viable outcome.

- Design of the basement levels to meet parking, waste collection and servicing requirements.

- A capacity to be developed as a sustainable green exemplar.

The Concept Design responds to these objectives as follows:

Yield and Efficiency

The Concept Design meets Fraser's primary commercial objective of maximising floor-space within a framework of high quality design, delivering 13792 sqm. of GFA at an FSR 5.6:1.

The Concept Design provides a total yield of 144 apartments, as well as 774 sqm of ground floor commercial/retail space.

Apartment Mix

The Concept Design addresses Frasers preferred unit mix and areas, as follows.

	Yield	Target	Actual	Area Target	Actual
Studios	22	15%	15.3%	40-42 sqm	43– 46 sqm
1-Bed/ 1-Bed+Study	51	35%	36 %	50-55/55-60 sqm	54 – 63 sqm
2-Bed/ 2 Bed Dual-Keys	44	45%	43.1%	75-80/85-95 sqm	88 – 95 sqm
3-Bed	8	5%	5.6%	110-130 sqm	110 – 120 sqm
TOTAL	144				

Preferred Apartment Planning

We have reviewed and integrated Frasers preferred internal apartment planning requirements into the Concept Design. The scheme provides a range of different types within each apartment size, generally over a single level with correctly proportioned rooms that allow for flexibility and efficiency of furnishing.

Commercial/Retail Space

The open ground floor plane is punctuated by a series of glazed "pods" enclosing the Lift Lobby and commercial retail tenancies positioned at the corners of the site. These pods could readily accommodate diverse uses and exciting interior design outcomes, including mezzanines on the Abercrombie Street side.

Buildability

TCA recognise Frasers' requirement for simple, cost effective, low maintenance and robust construction systems. We believe that the Concept Design offers a quite conventional planning rationale for a building of this type, and would be suited to a variety of structural and construction methodologies.

Structure is positioned to provide rational, efficient floor spans and continuity through the ground floor and basement levels to the foundations. The core is compact and rectilinear in plan, allowing for conventional framed or concrete construction.

Party walls may be structural precast concrete or non-structural/lightweight within a column grid.

Facades are conceived as a systematised metal cladding system with a preference for zinc, given its aesthetic qualities and flexibility for on site construction.

Carparking and Service Access

The maximum car-parking provision for the proposed yield and apartment types as defined in the LEP/DCP is 86.1 spaces, which is achieved in the Concept Design. Access for waste collection, removal vans and other service vehicles will be efficiently planned to minimise excavation and provide unimpeded private vehicle circulation.

The carpark entry is located near the low corner of the site on Irving Street, to minimise ramp length. For planning and cost reasons, we propose two alternatives for large vehicle access:

- Irving Street Loading Bay – this street level bay would be immediately adjacent to the proposed central Waste Store and provide direct level access to the elevators for furniture removals. The loading bay would be discreetly integrated into the public domain, and waste collection could be managed to avoid busy times of the day.

- On-site loading bay. This option requires access from Irving Street into a right-angle internal Loading Bay. Vehicles could reverse into the bay, or alternatively an on-site turn-table considered.

APPENDIX A - PROJECT COMPLIANCE TABLES

FRASERS BROADWAY
BLOCK 8 CENTRAL PARK RESIDENTIAL DEVELOPMENT
SUMMARY OF COMPLIANCE WITH PRIMARY DEVELOPMENT CONTROLS

Note: This Compliance Schedule is a summary of the key controls that apply to the site and are relevant to the development proposed by the TCA Concept Design.

SYDNEY LOCAL ENVIRONMENTAL PLAN (LEP) 2005

The Frasers Broadway site is the only remaining portion of the Sydney LGA to which LEP 2005 still applies. The requirements of the CUB SIte Concept Master Plan and subsequent modifications generally supersede and takes precedence over the general requirements of LEP 2005.

Sydney LEP2012 supersedes LEP2005, however we have assumed that the latter is the primary control based on the Brief summary of relevant Controls.

Whilst the general objectives of the LEP in relation to design quality outcomes remain relevant, these have been addressed in preparation of the CUB Site Master Plan and Modifications. The only numeric control that we believe should be relevant in terms of the Concept Design relates to car parking provision.

Matter/Clause	Control	Compliance	Notes
Car-parking	Prescribed maximum rates: - 1 space per 4 no. Studios or Bed-Sits - 1 space per 2 no. 1-Bed Units - 1 space per 1 no. 2-Bed Units + 1 space per each additional 5 units - 2 spaces per 3-Bed Units - Service, delivery vehicle, motor and bi-cycle parking, disability parking to DCP requirements	Yes	Frasers Design Brief does not require any parking for Studio or 1-Bed Units.

SEPP65 AND RFDC

Matter	Control	Compliance	Notes
Unit Sizes	Minimum apartment sizes: 50sqm 1-bed; 70sqm 2-bed; 95sqm 3-bed.	Yes	
Open Space	Open space to be provided at 25-30% of the site area. Minimum area of ground level private open space 25 sqm and minimum dimension of 4 metres. Balconies to have a minimum depth of 2 metres.	No N/A Yes	
Deep Soil	25% of minimum required ground level private and/or communal open space to be deep soil.	No	
Building Depth	Building depth maximum of 18 metres.	Yes	
Building Separation	5-8 storeys: 18m Habitable/Habitable, 12m Habitable/Non-Habitable, 9m Non-Habitable/Non-Habitable. 9 + storeys: 24m Habitable/Habitable, 18m Habitable/Non-Habitable, 12m Non-Habitable/Non-Habitable.	 Yes Yes Yes No Yes Yes	 To Block 4A - refer to Design Statement.
Internal Circulation	In a double loaded corridor, no more than eight units are to be served from a single corridor.	Yes	
Apartment Layout	Single aspect apartment max depth 8 m from window. Back of kitchen max 8 m from window.	Yes Yes	
Daylight Access	70% of apartments receive 2 hours sunlight between 9am and 3pm at mid-winter**. Max of 10% of units to be single aspect and south-facing.	Yes No	**2 hours required by DCP 2012 and generally allowable under SEPP65 /RFDC for inner urban sites. 72% achieved. 12% achieved.
Cross Ventilation	Minimum of 60% of units to be cross-ventilated. Minimum of 25% of kitchens should have access to natural ventilation.	Yes Yes	72% achieved. 31% achieved.
Storage	To be provided at the following rates: 6m3 per 1-bed; 8m3 per 2-bed; 10m3 per 3-bed.	Yes	Capable of being achieved in units and basement. To be confirmed in DA submission

SYDNEY DEVELOPMENT CONTROL PLAN (DCP) 2012

The City of Sydney website notes DCP 2012 applies to the CUB site. This DCP came into force four years after the Site Master Plan was approved, and as such its provisions are often incompatible with the Master Plan provisions for Central Park Block 8. We have however provided a summary of the most relevant built form provisions (Part 3-General Provisions and Part 4.2-Development Types-Residential Flats).

Matter	Control	Compliance	Notes
Streets 3.1.1.2	New streets are to be located and orientated to enhance the relationship between built form, open space, views, active street frontages, pedestrian paths and the bicycle network. New streets to be constructed in accordance with the Sydney Streets Design Code.	Yes	
Defining the Public Domain 3.2.2	Ensure that development contributes to the activity, safety, amenity and quality of streets and the public domain.	Yes	
	Present appropriate frontages to adjacent streets and public domain in terms of scale, finishes and architectural character.	Yes	
	Provide legible and accessible entries from the street and the public domain.	Yes	
	Reinforce Central Sydney's strong definition of streets and the public domain aligned with property boundaries.	Yes	
	Residential developments are to have a street address and provide a direct line of sight from a street to the principal building entry or entries.	Yes	
	Residential developments are to provide individual entries directly from the street to any ground floor dwellings next to the street.	N/A	Ground floor is retail and commercial.
Active Frontages 3.2.3	Ensure ground floor frontages are pedestrian oriented and of high design quality to add vitality to city and village streets.	Yes	
	Provide fine grain frontages at ground level.	Yes	
	Generally, a minimum of 70% of the ground floor frontage is to be transparent glazing with a predominantly unobstructed view from the adjacent footpath to at least a depth of 6m within the building.	Yes	
	Generally, foyer spaces are not to occupy more than 20% of a street frontage of a building in Central Sydney and no more than 8m of a street frontage elsewhere.	Yes	
	Active frontages are to be designed with the ground floor level at the same level as the footpath.	Yes	
Footpath Awnings 3.2.4	Provide in locations shown on Awnings Map	N/A	Not required
Wind Effects 3.2.6	Applies to buildings over 45m in height	N/A	
Reflectivity 3.2.7	Report may be required for tall buildings.	N/A	
	Light reflectivity from building materials not to exceed 20%	Yes	Metal cladding to be non-reflective
Design Excellence 3.3.1	Provisions for Competitive Design Process.	Note	This site may require a design competition under the LEP2012 provisions as it exceeds 25m in height.
ESD 3.6	General Objectives	Yes*	*The Concept Design has the potential to comply with the objectives and provisions of this Section.
Car Sharing Schemes 3.11.2	The minimum number of on-site parking spaces to be made available for car share scheme vehicles is to be provided according to the following rates: (a) residential development, other than dwelling houses and dual occupancies, on land shown as (i) Category A - 1 per 50 car spaces	Yes*	* Can be complied with.
Bike Parking 3.11.3	Provide 1 space/dwelling + Visitor 1 per 10 dwellings.	Yes*	*Bike parking can be integrated into a number of locations, within the ground floor and the Basements.
Vehicle Parking 3.11.4	For residential buildings provide in accordance with the rates in Sydney LEP2012. Prescribed maximum rates are: 0.2-Studio/0.4-1Bed/0.8-2Bed/1.1-3Bed Visitors 0.167-30 units/0.1-30-70units/.05 thereafter.	Note*	LEP2012 rates are lower than LEP2005. However both are maximums, therefore provided the total carparking provisions of LEP2005 are not exceeded, compliance is achieved.
Service Vehicles 3.11.6	To be located entirely within site boundaries.	Yes/No	Dependent on waste and large vehicle service strategy to be adopted.
Motorcycles 3.11.7	Refer DCP Schedule 7	Yes*	Can be complied with.
Accessible Parking 3.11.9	Refer DCP Schedule 7	Yes*	Can be complied with.

COMPLIANCE TABLE

Vehicle Access to Developments Greater Than 1000sqm GFA 3.11.10	No closer than 10m to an intersection.	Yes	
	Not within 15m of the alignment of an intersection where the proposed vehicle access is to be used by service vehicles;	Yes	
	Not within 20m of the approach to, and 10m of the departure from an existing or proposed pedestrian crossing.	No	
Vehicle Access and Footpaths 3.11.11	Vehicular access is to be designed to give priority to pedestrians and cyclists by continuing the type of footpath material and grade.	Yes	
	Wherever practicable, vehicle access and egress is to be a single crossing with a maximum width of 3.6m over the footpath, and perpendicular to the kerb alignment.	No	Separated vehicular entry/exit points are not possible with this Concept Design.
	Subject to urban design, heritage and streetscape considerations, access is to be designed to avoid reversing movements into or out of a public street for all developments other than dwelling houses. If necessary, a mechanical turntable may need to be installed to achieve this requirement.	TBC	Alternatives provided - refer Design Statement.
	Direct access to a designated arterial or sub-arterial road is not permitted wherever an alternate access can be provided.	Yes	
Waste Collection and Loading Areas 3.11.13	Preferred location in Basement, to provide access requirements and clearances for 9.25m Council vehicle.	No	Alternatives provided - refer Design Statement.
Adaptable Dwellings 3.12.2	Provide 15% of total dwelling number.	Yes*	*The Concept Design has the capacity to comply with this requirement.
Building Height 4.2.1	Defined by Building Height in Storeys Map and LEP2012 for height in metres.	N/A	Refer Site Concept Master Plan
Floor to Ceiling Heights 4.2.1	3.6 m on Ground Floor.	Yes/No	Partial non-compliance in south0east corner of site.
Building Setbacks 4.2.2	Setbacks are to be consistent with the Building Setback and Alignment Map.	N/A	
Amenity - Solar Access 4.2.3.1	Achieve min. 2 hours sunlight between 9am and 3 pm mid-winter to 1sqm of living room windows and 50% of outdoor private open space (for 70% of apartments)	No*	*Site density and adjacent buildings to north preclude this.

Amenity - Internal Common Areas 4.2.3.3	Internal common areas to have access to daylight and outlook.	Yes	
	Provide spaciousness and safety in common corridors. Minimum 1.8m in front of lifts.	Yes	
Deep Soil 4.2.3.6	Not required in Central Sydney	Yes	
Private Open Space 4.2.3.7	75% of dwellings to have private open space.	Yes	
	Ground Level POS - 25 sqm and 4m depth.	N/A	
	Above Ground POS - 10 sqm and 2m depth.	No/Yes	To Brief requirements.
Common Open Space 4.2.3.8	Min. 25% of site area.	No	
Ventilation 4.2.3.9	General Objectives	Yes	
Outlook 4.2.3.10	Provide a pleasant outlook from all apartments.	Yes	
Unit Mix 4.2.3.12			Brief Targets: Concept Design:
	Studio 5-10%	Yes	Studio 15% 15.3%
	1-Bed 10-30%	No	1-Bed 35% 35.4%
	2-Bed 40-75%	Yes	2-Bed 45% 44.4%
	3-Bed 10-100%	No	3-Bed 5% 4.9%
Fine Grain, Diversity and Articulation 4.2.4	Max 65m facade length for 18m+ street width.	Yes	
	Buildings in excess of 40m length to be articulated into multiple components.	Yes	
	Facades to be designed to present as a group of buildings rather than a single building.	No	
	Groups of buildings served by one core to be designed as distinct building “component”.	No	
	Generally “component” should not exceed 25 dwelling per core.	No	

SYDNEY DEVELOPMENT CONTROL PLAN (DCP) 1996

The Competition Brief states that DCP 1996 applies to the CUB site. This DCP was in force at the time the Site Master Plan was approved. The following Table addresses Sections of the DCP relevant to the proposed COncept Design only.

Matter	Control	Compliance	Notes
Street Alignment 2.1.1	New buildings are to have street frontages built predominantly to the street alignment.	Yes	
Street Frontage Height 2.2.1	The street frontage height of a new building is to be between 20 metres and 45 metres above street ground level and have regard to: (i) the street frontage heights of adjacent buildings, (ii) the predominant street frontage height in the vicinity of the proposed building.	Yes	
Setbacks to Residential Buildings Fronting Laneways 2.3.15	On sites adjoining or fronting lanes, the minimum setback for residential buildings higher than four storeys is to be 6 metres from the centre of the lane.	Yes	
Setbacks for buildings on the same site 2.3.16	For buildings on the same site, minimum separation distances are to be as shown on Figure 2.16 (up to 45m height - 12m minimum for habitable room-habitable room).	Yes**	**This control may be considered in relation to proposed separation distance between Block 8 and Block 4 (RFDC Rules of Thumb).
Street Frontage Activation 2.5.3	Buildings with frontages to all other streets and lanes are to contribute to the liveliness and vitality of these streets by providing visual interest,well designed and attractive entrances, lobbies and commercial uses at ground level, and incorporating, where practicable, either open or enclosed shopfronts with window displays of merchandise.	Yes	
2.5.4	Ground floor uses are to be at the same level as the footpath.	Yes	
Building Bulk 2.6	Note	N/A	Provisions only apply to buildings higher than 45 metres. Addressed in Concept Master Plan and Modifications.
Building Exteriors 2.7.2	Building materials (including glass) are to be predominantly light in colour to gain better quality reflected light into the streets and extensive expanses of blank glass or solid wall are to be avoided.	Yes	
2.7.4	Balconies and terraces should be provided, particularly where buildings overlook parks and on low rise parts of buildings. Gardens on the top of setback areas of buildings are encouraged.	Yes	
2.7.5	The siting and configuration of buildings should take into account the impact on surrounding development and public spaces in terms of amenity, shadowing, visual privacy and view sharing for residential buildings.	Yes	
Sunlight to Public Spaces 4.1	To ensure that there is adequate sun access, shadowing effects of new buildings on publicly accessible space are to be considered for the hours of 12 noon to 2 pm between 14 April and 21 June.	Yes	Addressed in Concept Master Plan and Modifications.
Energy Efficiency 4.3	An Energy Efficiency Report is required to accompany the DA for any new building with a construction cost of $1 million or more.	Note	
Noise Reduction 4.4	All residential buildings and serviced apartments are to be constructed so that the repeatable maximum L Aeq (1 hour) level does not exceed the maximum noise levels specified in Clauses 6.1.14, 6.1.15 and 6.1.16	Note	
Reflectivity 4.5	New buildings and facades should not result in glare that causes discomfort or threatens safety of pedestrians or drivers. Visible light reflectivity from building materials used on the facades of new buildings should not exceed 20%.	Note	
On Site Parking 5.1	On-site parking in Central Sydney should generally be located below ground so that active uses are maximised at the street level. The design of driveways (subject to Section 3.3 Vehicle Access and Footpath Crossings) and parking areas, and the location of driveways are to generally be in accordance with the requirements set out in the *Guide to Traffic Generating Developments* (NSW Roads and Traffic Authority and Australian Standard 2890.1).	Yes	
	Car parking for people with mobility impairment is to be provided in accordance with Australian Standard 2890.1 This requires a minimum of 1-2% of parking spaces to be provided and appropriately designated for use by people with mobility impairments.	Yes	
	Residential buildings - 1 space for first 50 dwelling/and 0.5 spaces for every 50 dwellings/apartments thereafter. Retail - 1 space/350 sqm FSA or part	Yes	
	Loading areas are to be screened from the street.	Yes	
	Motorcycle parking is to be provided in all buildings that provide on-site car parking, and is to be equal to at least one car parking space for every 100 car parking spaces or part thereof.	Yes	
Lightwells and Internal Courtyards 6.1.3	Lightwells may be used as a source of daylight, ventilation, outlook and sunlight for dwelling units provided that for a height between 18 metres and 45 metres, the minimum plan dimension is to be 6m, or 9m if overlooked by bedrooms.	Yes**	Bedrooms within proposed internal laneway/ passage have windows oriented to open ends.

COMPLIANCE TABLE

Sun Access 6.1.4	Living rooms and private open space should be the main recipients of sunlight in dwelling units. Where possible, sun access should be for a minimum of two hours per day on the equinox (March 21) measured on the main window of the rooms or at the front edge of the open space. Buildings should be designed to maximise the number of dwelling units with sun access to the principal windows.	Yes	Where possible, solar access is provided taking into account the sites orientation and adjacent built form.
6.1.5	On west facing facades subject to direct sunlight, external shading or other energy saving measures should be integrated into the design of residential buildings and serviced apartments.	Yes*	*To be addressed in detail with DA.
6.1.6	The maximum depth of a habitable room from a window providing light and air to that room is to be 10 metres.	Yes	
Ventilation 6.1.7	Adequate ventilation is an important contributor to the amenity of dwelling units. Where possible, natural through ventilation in dwelling units should be achieved by having window openings facing different directions.	Yes	
6.1.8	Dwelling units are to have access to outside air, other than solely by means of lightwells or building setbacks enclosed on three sides by other buildings.	Yes	
Visual Privacy 6.1.10	The orientation, internal configuration and screening devices of dwelling units should be designed to promote visual privacy between residential buildings, serviced apartments and other development, particularly within the same development.	Yes	
Outlook 6.1.11	The design of residential buildings and serviced apartments should ensure the provision of outlook, as distinct from views, from all dwelling units.	Yes	
Floor to Ceiling Height 6.1.20	A minimum floor to ceiling height of 2.7 metres is required in living rooms and bedrooms of residential buildings and serviced apartments.	Yes	
Storage 6.1.22	Accessible and adequate storage facilities are to be provided for the occupants of residential buildings and serviced apartments at the following rates: Studio apartments 6 sqm. 1 bed apartments 8 sqm. 2 bed apartments 10 sqm. 3+bed apartments 12 sqm. 50% minimum storage to be within unit.	Yes*	*TBC in DA submission.

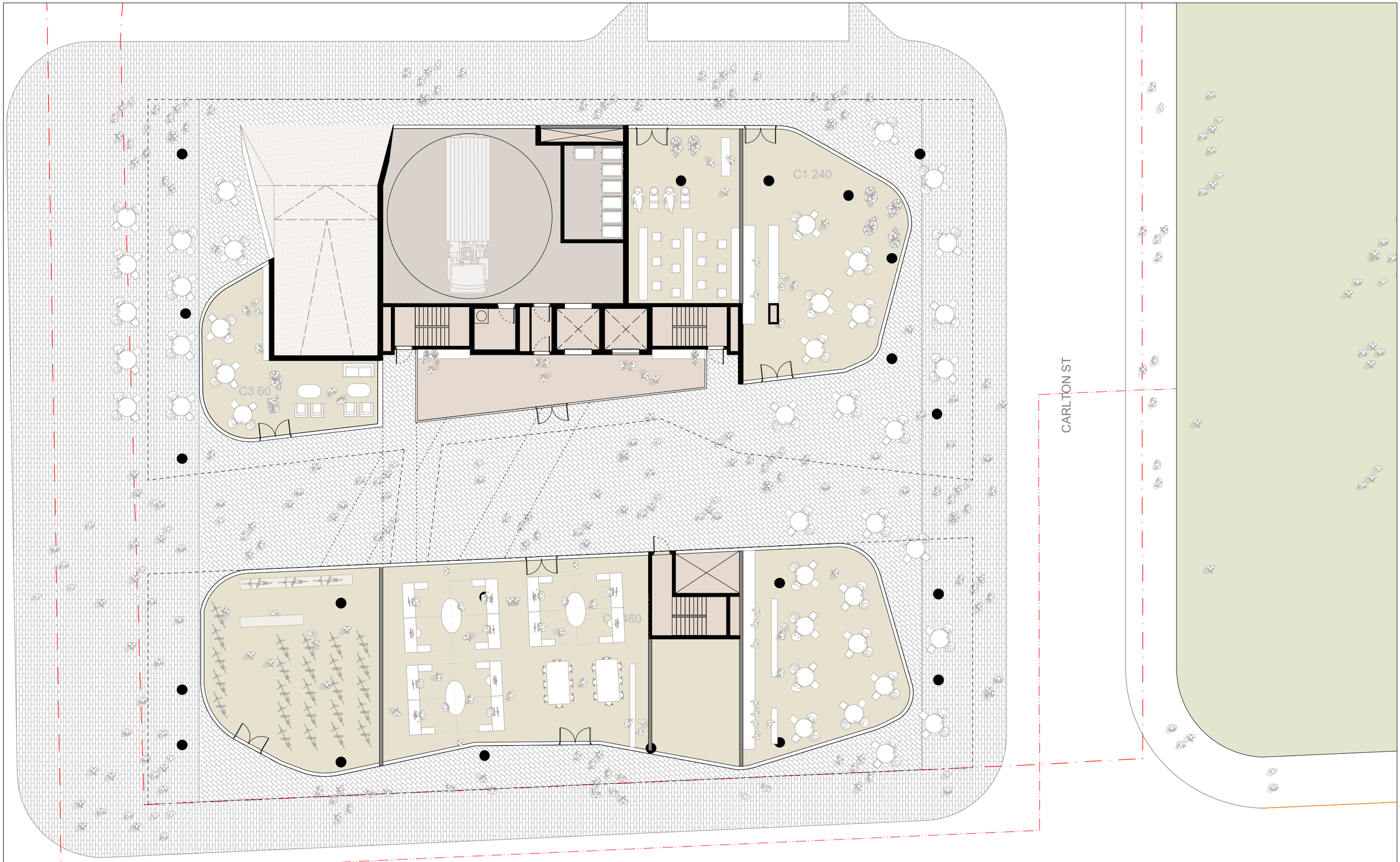
Unit Mix 6.1.27	All residential developments in excess of 20 dwellings to provide the following mix of units: Studio apartments Maximum of 15% 1 bed apartments Maximum of 30% 2 bed apartments Minimum of 40% 3+ bed apartments Minimum of 15%	Note*	*Unit Mix to Brief. DCP Mix may be varied in consultation with Consent Authority.
6.1.29	The maximum percentage of 1 bedroom units may be increased above 30%, provided the numbers of studio apartments and 1 bedroom units does not exceed 45% of the total units proposed.	No	
Unit Sizes 6.1.34	All units within residential and serviced apartment developments are to provide the following minimum unit sizes: Studio apartments 40sqm 1 bed apartments 55sqm 2 bed apartments 80sqm 3+ bed apartments 100sqm	Note*	*Unit sizes to Brief. * Unit sizes comply with RFDC minimums.
Max Units Serviced from a Common Lobby 6.1.36	In all residential and serviced apartment developments, the number of dwelling units per floor accessible from a common lobby is limited to a maximum of ten (10).	Yes	
Internal Unit Design 6.1.38	In all new residential buildings and serviced apartment developments, bedrooms are required to have direct ventilation and natural light.	Yes*	*Studio sleeping area integrated into main living space.

Building	1																								
Level		Studio	1 Bed	1 Bed + Study	2 Bed small	2 Bed dual key	3 Bed	GFA																	
13	0							391																	
12	6				2		4	582																	
11	7		2		2		3	785																	
10	9		3	2		4		792																	
9	11	1	2	1	3	4		1130																	
8	16	3	4	2	2	5		1362																	
7	16	3	4	2	2	5		1362																	
6	16	3	4	2	2	5		1362																	
5	16	3	4	2	2	5		1362																	
4	16	3	4	2	2	5		1362																	
3	17	3	4	2	3	5		1362																	
2	14	3	3	2	2	4		1166																	
1								774																	
Total	144	22	34	17	22	42	7	13792																	
			23.6%	11.8%	15.3%	29.2%																			
%		15.3%	35.4%		44.4%		4.9%																		

Overall																									
Level		Studio	1 Bed	1 Bed + Study	2 Bed small	2 Bed large	3 Bed		GFA		SEPP 65 Requirements				PARKING	Visitor	Studio	1 Bed	2 Bed	3 Bed	Total				
13	0	0	0	0	0	0	0		391																
12	6	0	0	0	2	0	4		582																
11	7	0	2	0	2	0	3		785																
10	9	0	3	2	0	4	0		792																
9	11	1	2	1	3	4	0		1130																
8	16	3	4	2	2	5	0		1362		Total Apartments			144	LEP catB	0.067	0	0	1	1.5					
7	16	3	4	2	2	5	0		1362		Solar Access - Required			101	No. Apts	144	22	51	64	7					
6	16	3	4	2	2	5	0		1362		Solar Access - Achieved			104											
5	16	3	4	2	2	5	0		1362		Cross Ventilation - Required			86	Max.	13	0	0	64	10.5	87				
4	16	3	4	2	2	5	0		1362		Cross Ventilation - Achieved			108											
3	17	3	4	2	3	5	0		1362		Max. South Facing - Required			14	Provided						87.21				
2	14	3	3	2	2	4	0		1166		Max. South Facing - Achieved			18											
1									774																
Total	144	22	34	17	22	42	7		13792																
			23.6%	11.8%	15.3%	29.2%					Public Domain Area			632m2											
%		15.3%	35.4%		44.4%		4.9%																		
Target Mix		15%	35%		45%		5%																		

Site Area		2437	sqm	referenced from 3.1 Design Brief
FSR		6	:1	based on target GFA / site area
Acceptable GFA		12500	sqm	
Target GFA		14500	sqm	1000 of which is to be retail
NLA		11584		
RESI GFA		12627		
GFA achieved		13792	sqm	

APPENDIX B - TYPICAL PLANS



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Block 8 Frasers Broadway

Broadway Sydney, NSW

PLAN - Level 1 (Ground)

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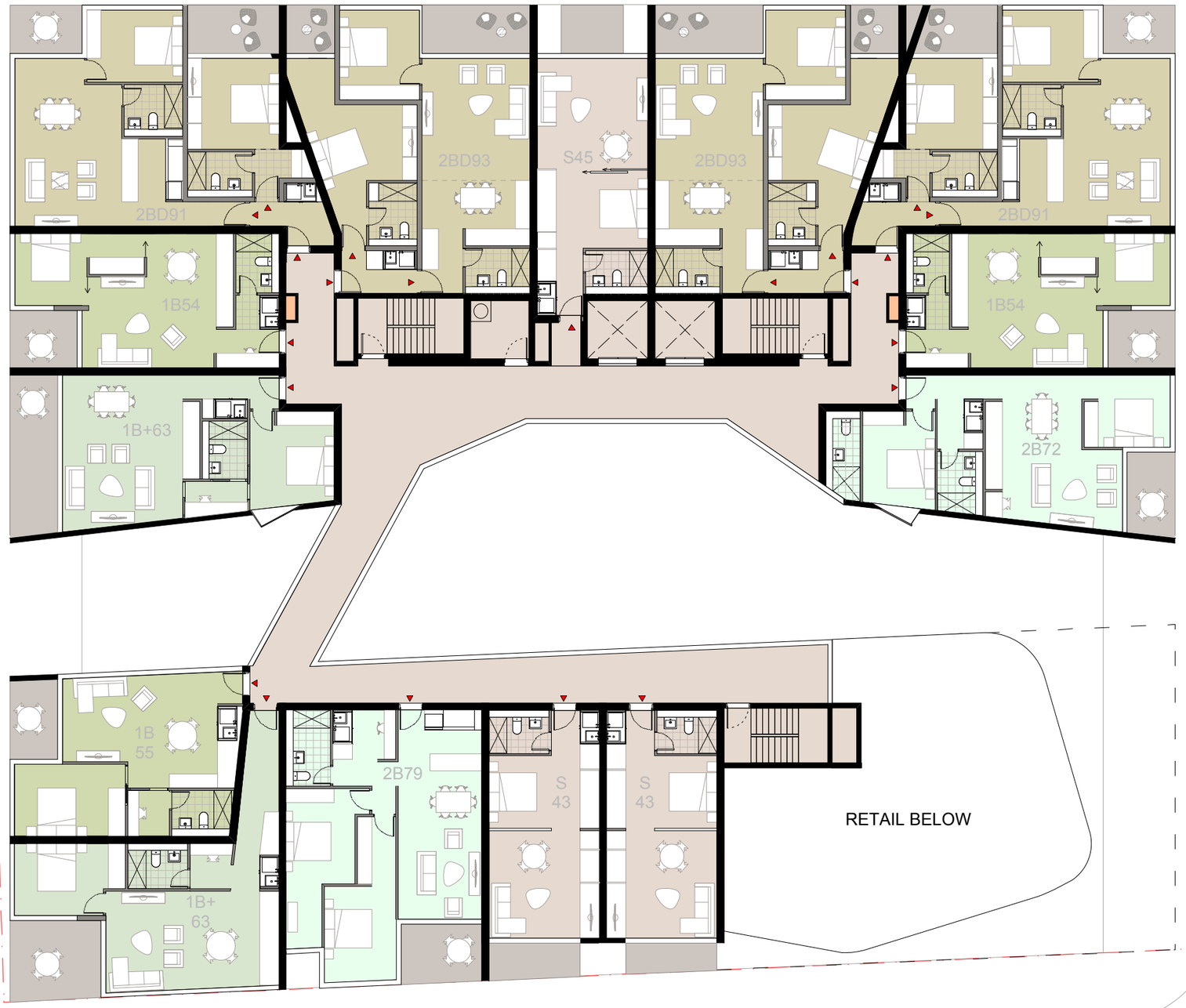
PROJECT No.	1304
PLOT DATE	7/6/13
REVISION	A



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PLAN - Level 2

SCALE - 1:200 @ A3 0 1 2 4 6 8 10

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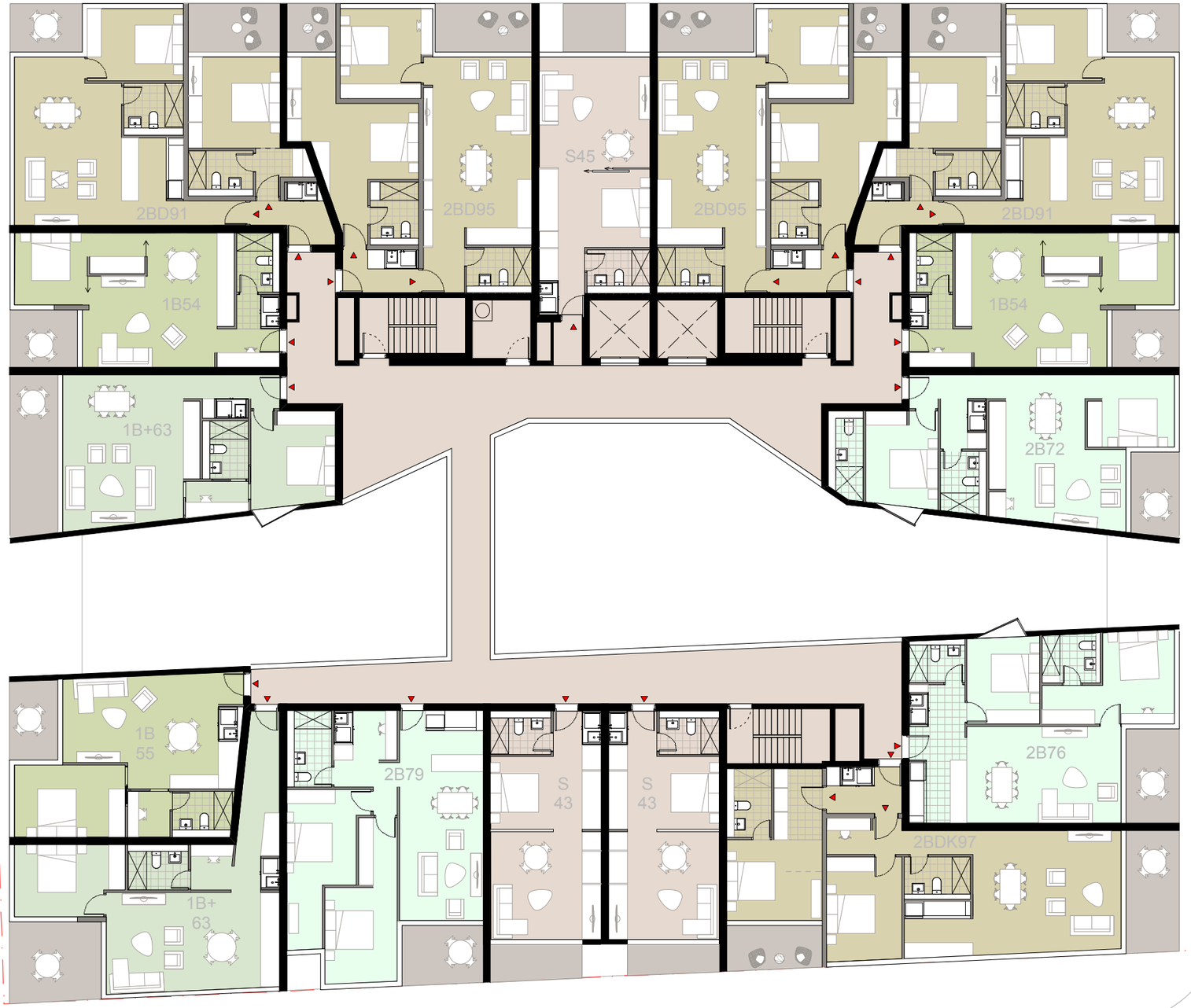
REVISION	A



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PLAN - Levels 3-8

SCALE - 1:200 @ A3 0 1 2 4 6 8 10

DWG NO.	A_03
PROJECT No.	1304
PLOT DATE	7/6/13
REVISION	A

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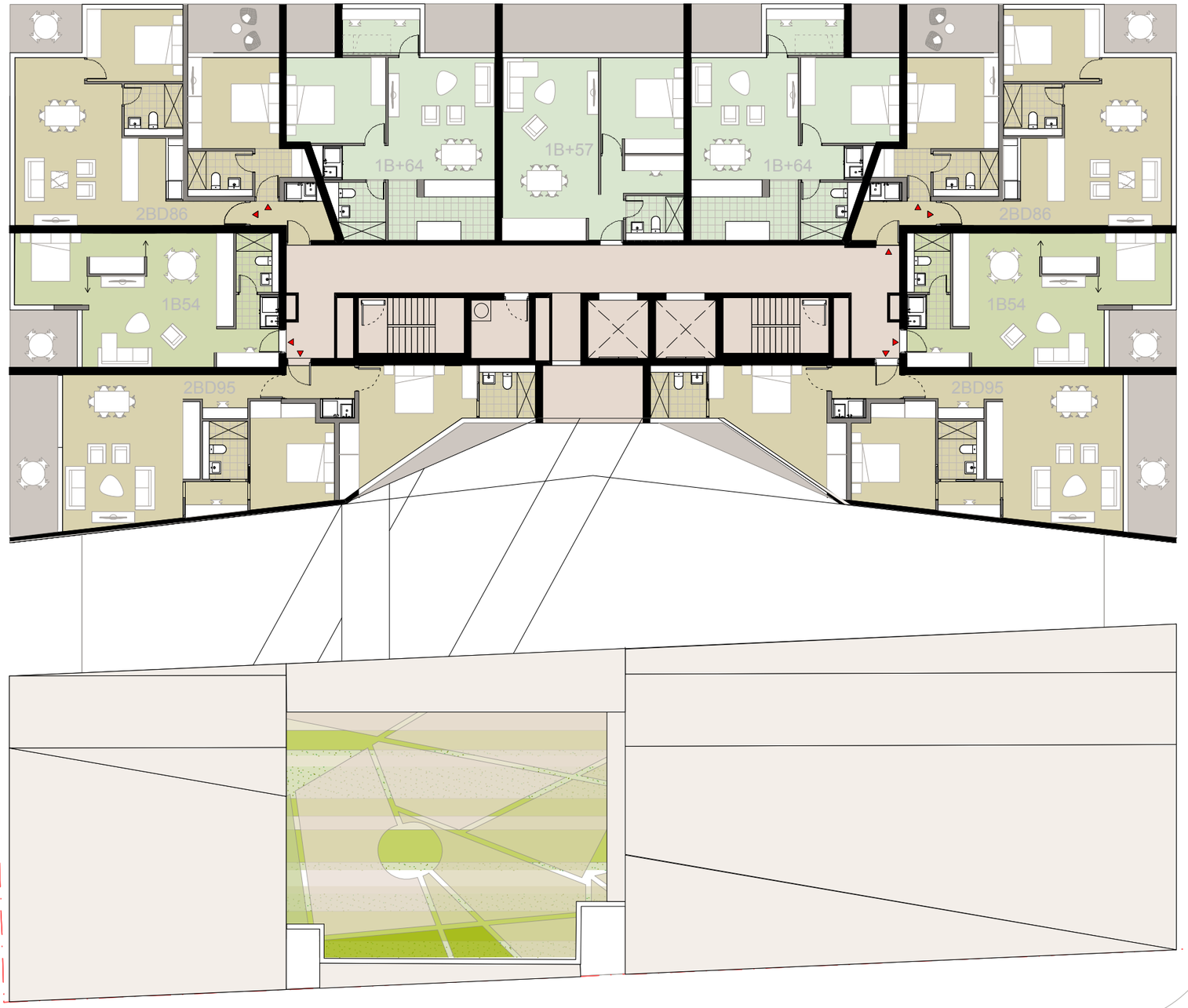
PLAN - Level 9

SCALE - 1:200 @ A3 0 1 2 4 6 8 10

DWG NO.	A_04
PROJECT No.	1304
PLOT DATE	7/6/13
REVISION	A



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PLAN - Level 10

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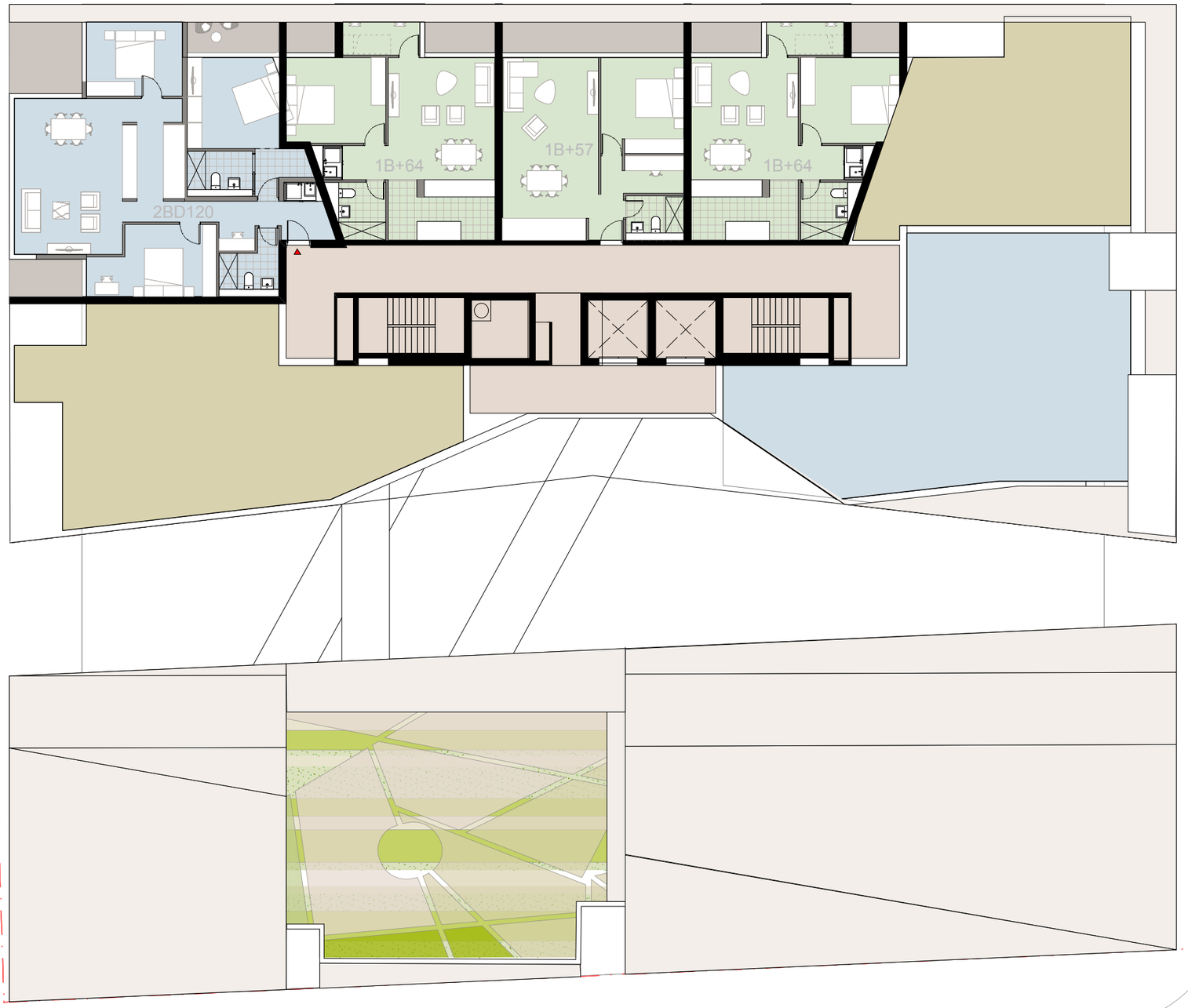
PROJECT No.	1304
PLOT DATE	7/6/13
REVISION	A



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Block 8 Frasers Broadway

Broadway Sydney, NSW

PLAN - Level 11

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PROJECT No.	**1304**
PLOT DATE	**7/6/13**
REVISION	**A**

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PLAN - Level 12

SCALE - 1:200 @ A3 0 1 2 4 6 8 10

DWG NO.	A_07
PROJECT No.	1304
PLOT DATE	7/6/13
REVISION	A

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APPENDIX C - ENVELOPE / SUN PLANE ANALYSIS

WINTER SOLSTICE

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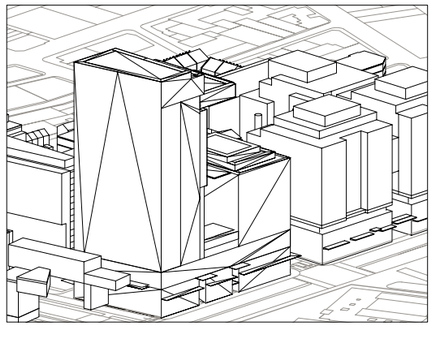
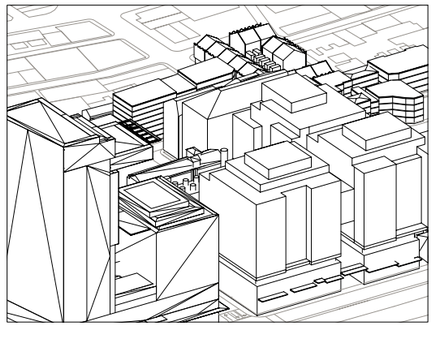
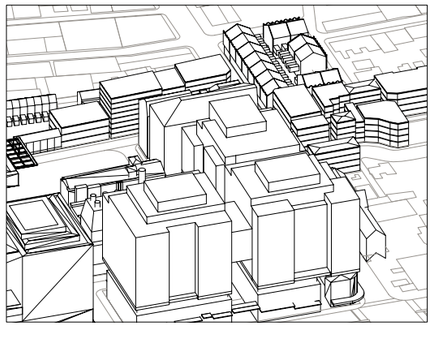
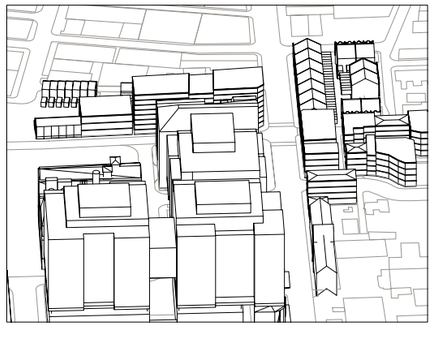
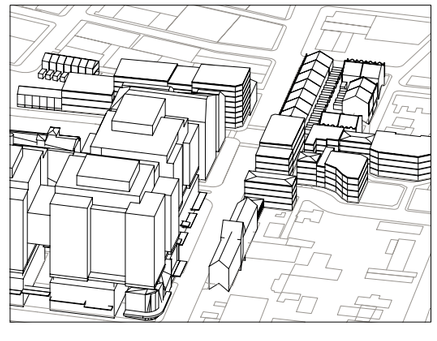
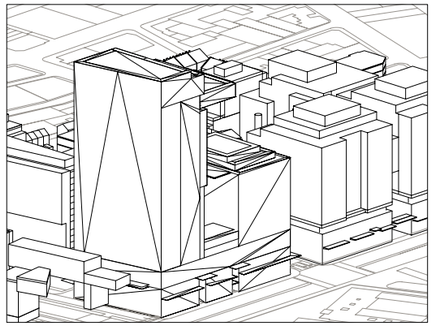
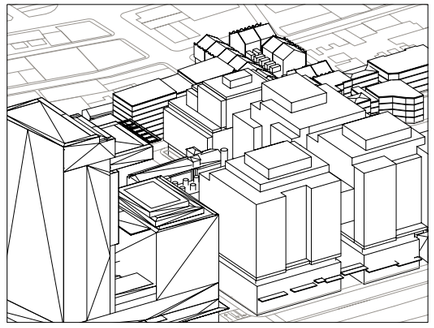
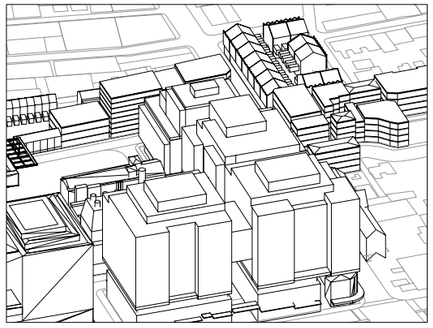
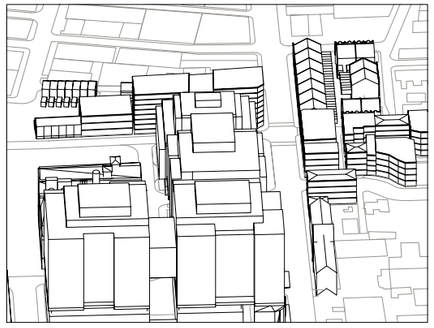
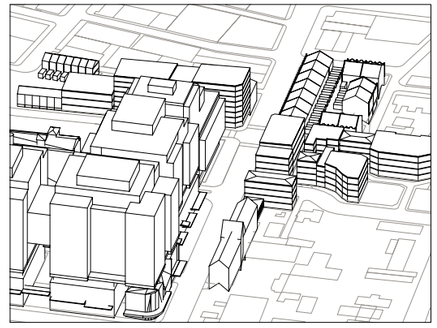
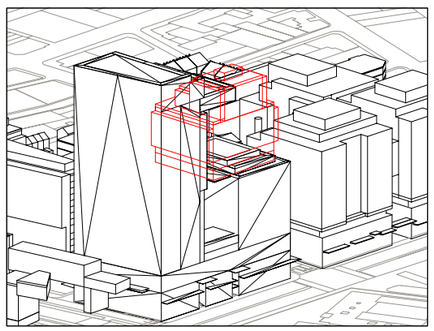
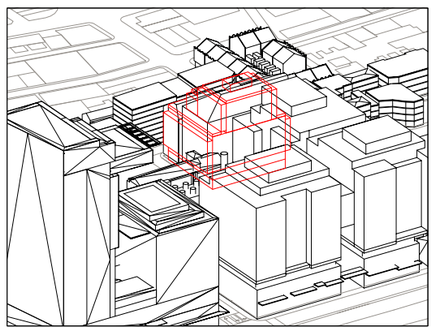
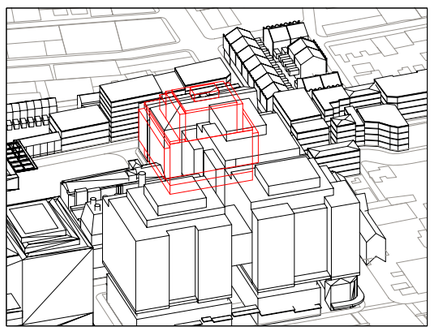
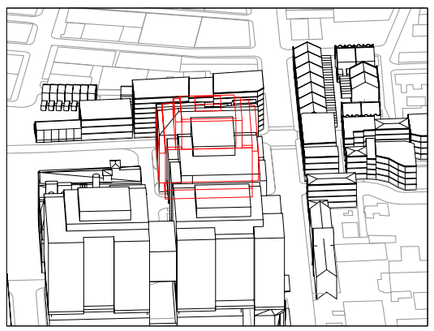
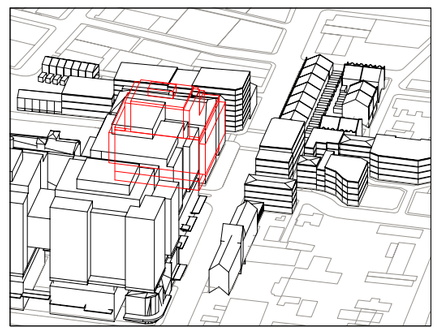
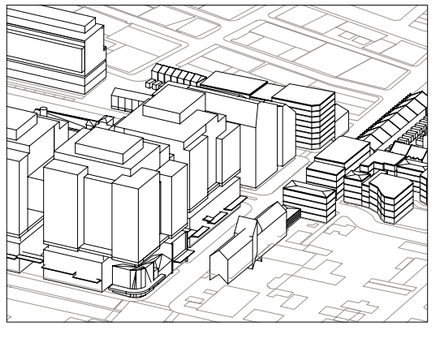
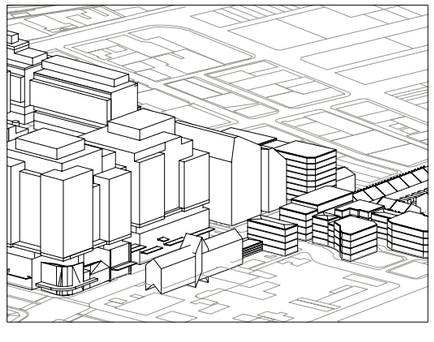
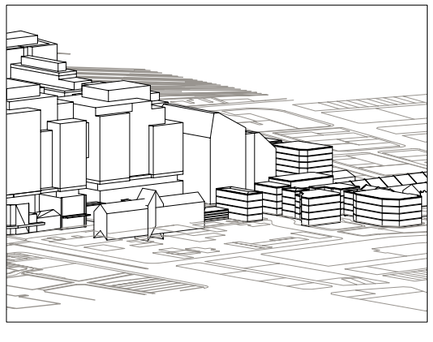
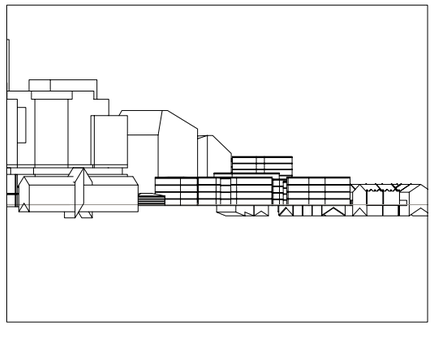
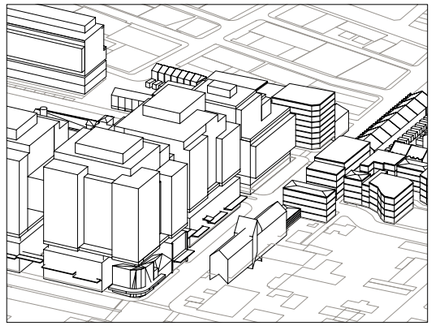
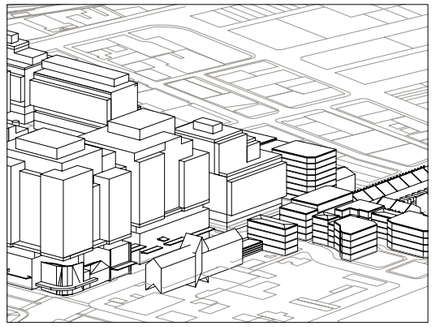
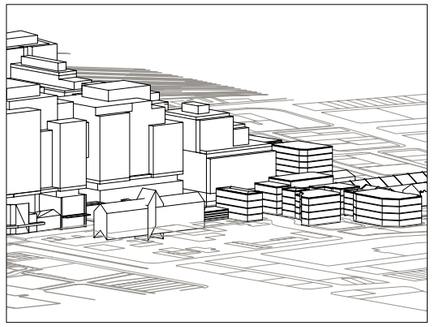
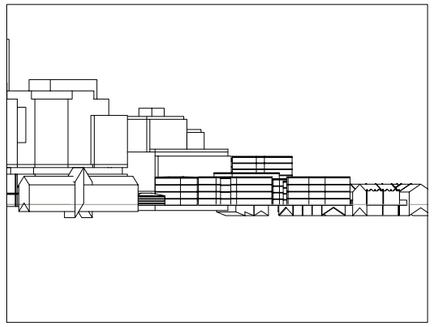
PROPOSED ENVELOPE					
APPROVED ENVELOPE					
COMPARISON					

WINTER SOLSTICE

	02:00pm	03:00pm	04:00pm	05:00pm
PROPOSED ENVELOPE				
APPROVED ENVELOPE				
COMPARISON