15.04.2020

TURNER piety group

ONE THE WATERFRONT

URBAN DESIGN REPORT

23 Bennelong Parkway
Wentworth Point NSW 2127

S75W MOD 4 (2020)

By: TURNER
For: PIETY THP
Project Ref. No: 18039
Nominated Architect: Nicholas Turner 6695

01. INTRODUCTION

OVERVIEW

This 2020 S75w submission provides a strategy for the delivery of the remaining components with in the development at 23 Bennelong Parkway. The proposal has been revised since the 2018 submission in response to issues raised in that submission.

The application seeks to amend the approved concept envelopes in order to achieve the remaining approved FSA for the subject site. The changes are based on a merits driven approach that seeks to find opportunities to realise the FSA while also improving the amenity and built form outcome for all residents.

DESIGN STATEMENT

This proposal envisages a design outcome which is based on a merits driven approach that genuinely seeks to go further than 'business as usual' by providing better amenity for all residents within the development, and to adhere to best practice urban design principles:

Respects the principles of the planning framework: The Homebush Bay West DCP establishes objectives and controls for new development to deliver an attractive, appropriate, high amenity outcome for residents and visitors. The proposed amendments to the concept plan follow the urban design principles of this DCP. They create a street and block structure that optimises legibility, permeability and efficiency, and allow for a high quality architectural and landscape design that contributes positively to the character of the public domain.

Recognition of wider context: The overall built form of Wentworth Point has evolved from a typical perimeter block outcome with uniform heights (DCP 2004), to a Hybrid form characterised by a combination of stepping mid rise buildings with taller towers, creating a diversity of heights. This includes the recently approved 16 storey building at 6-8 Baywater Drive, within the context of the southern end of Wentworth Point. The proposed amendments to the concept plan at 23 Bennelong Parkway are consistent with the urban design rationale of the scheme at Baywater Drive, ie the location of appropriate height to provide markers within the streetscape and a legibility to built form.

Marrying with adjoining context: The proposal is respectful to it's context and aligned with the design intent of the as-built scheme. To date the built form of the approved DAs within the development has varied from the original concept envelope. This variation has allowed for stepping in the facade alignment, and substantial indents in the built form that result in an improved streetscape. The proposed 2020 amendments continue this fine grain pattern of indents and articulation, and are carefully grafted into the as-built scheme to achieve a holistic design outcome.

Increased amenity: The original concept plan was designed in the context of the previous RFDC, and the associated indicative scheme with it's continuous perimeter block layout needed to be amended to allow for ADG compliance. The redistribution of floor space into the taller envelopes allows for reduced building footprints and increased separation between buildings greater than that required by the ADG, and far more than that already achieved within the as-built component of the scheme. This reduced footprint will facilitate increased landscaped area, improved outlook, greater site permeability, and quality solar and cross ventilation to apartments.

Appropriate height: The variation in height is distributed via a stepped building form that responds to the streetscape and the important junction of Hill Road and Bennelong Parkway. Building C steps from 14 to 17 storeys, in order to allow for a comfortable transition from the existing 9 storeys when viewed from the east. Building F continues this stepping, with a series of distinct buildings forms ranging in height from 17 to 19 storeys. It is proposed to landscape these stepped forms with lush vegetation that softens the buildings and mimics the sloping typography of the Woo-La-Ra mound beyond. The strong vertical emphasis to the design proposal allows for a series of slender towers forms.

Sustainability: The proposal has the potential to improve on 'business-as-usual' within the approved concept envelopes. This submission allows for the inclusion of meaningful passive design elements that will reduce the environmental impact of the allowable Floor Space. Initiatives such as improved ADG compliance, more communal open area, and biophilic benefits such as increased vegetation and canopy coverage, could be made possible by this new submission. Fostering a sense of community is a key parametre for creating sustainable and safe new residential precincts, and the inclusion of the substantial residents facilities on Level 9 of Building F is aligned with this approach.

This submission has responded to the previous local and state authority feedback and the proposal has been substantially amended from the previous S75w design to resolve these items. These last two remaining buildings are the final piece of the jig-saw within this prominent site and precinct, and provide for the opportunity to achieve a greater outcome. For the reasons above, we strongly believe that this proposal deserves the Department's support.

02. CONTEXT

STRATEGIC CONTEXT

ACHIEVING BEST PRACTICE URBAN DESIGN:

A METROPOLIS OF THREE CITIES
Greater Sydney Commission: Greater Sydney Region Plan
Connecting People, March 2018

CENTRAL CITY DISTRICT PLAN
Greater Sydney Commission: Our Greater Sydney 2056
Connecting Communities, March 2018

SYDNEY GREEN GRID

GREENER PLACES

BETTER PLACED

PARRAMATTA LEP

WENTWORTH POINT DCP

PLANNING PRINCIPLES

GREATER SYDNEY

The plan is built on a vision of three cities where most residents live within 30 minutes of their jobs, education, health facilities, services and great places.

This is consistent with the 10 Directions for a Greater Sydney which establish the aspirations for the region over the next 40 years and are a core component of the vision and measure of the Plan's performance.

The plan envisions an additional 725,000 dwellings with and urban renewal supporting new and existing centres and enhanced local character.

Wentworth Point is part of the Central River City, Central City District located between the Health and Education Precinct, Rhodes, Sydney Olympic Park, Strategic Centre and the local centre of Newington. There are growing pedestrian and transport connections to each of these centres as part of the overall strategic development of the district.

The expanding Greater Sydney Green Grid brings improved health and enjoyment of the district's waterways. Bushland, biodiversity, scenic and cultural landscapes are protected. The precinct enjoys a network of open space, natural waterways including Parramatta River and the protected natural wetlands.

Cities are resilient and respond to urban impacts and climate change and manage energy, water and waste efficiently.

BETTER PLACED

BETTER FIT
Contextual, local and of its place

BETTER PERFORMANCE
Sustainable, adaptable, and durable

BETTER FOR COMMUNITY
Inclusive, connected and diverse

BETTER FOR PEOPLE
Safe, comfortable, and liveable

BETTER WORKING
Functional, efficient and fit for purpose

BETTER VALUE
Creating and adding value

BETTER LOOK AND FEEL
Engaging, inviting and attractive

GREENER PLACES

INTEGRATION
Combine Green infrastructure with urban development and grey infrastructure

CONNECTIVITY
Create an interconnected network of open space

CONNECTIVITY
Deliver multiple ecosystem services simultaneously

PARTICIPATION
Involve stakeholders in development and implementation

PARRAMATTA LEP

The Parramatta LEP aims to support local centres such as Wentworth Point, as important local places of development including housing, employment and recreation, that accommodates the needs of the existing and future residents.

Diversification of offering are encouraged when developments demonstrate efficient and sustainable use of energy and resources in accordance with ecologically sustainable principles.

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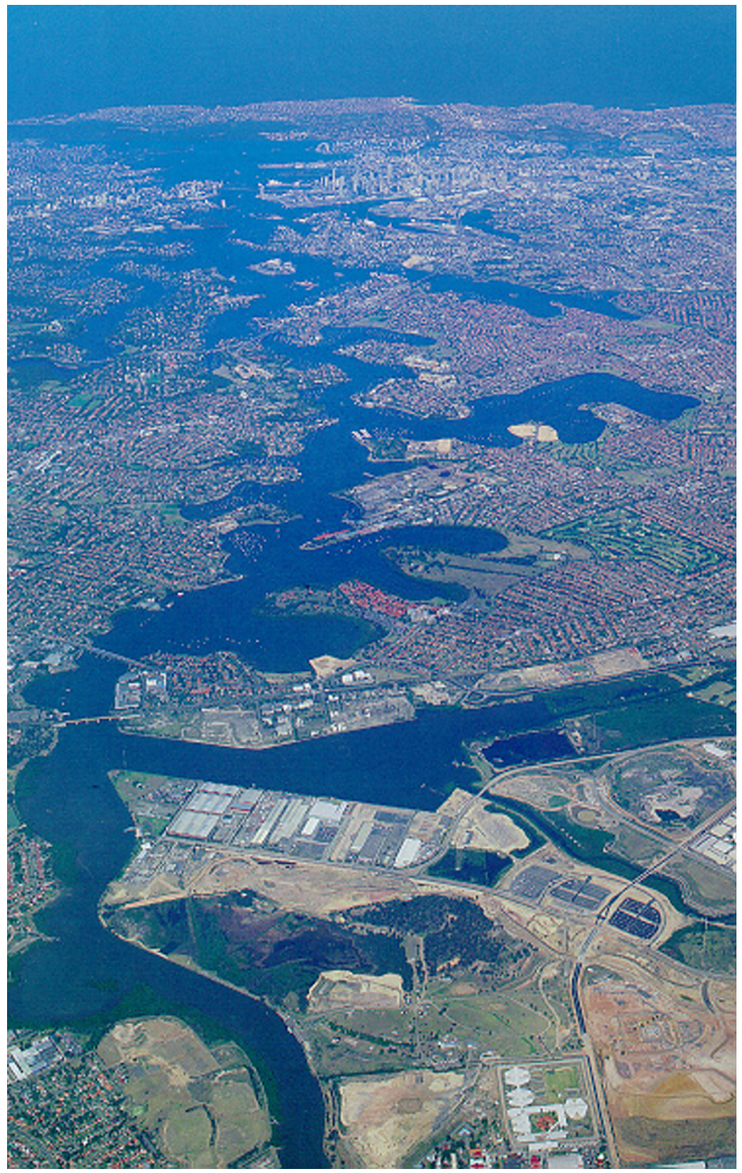
Nominated Architect: Nicholas Turner 6695, ABN 86 064 084 911

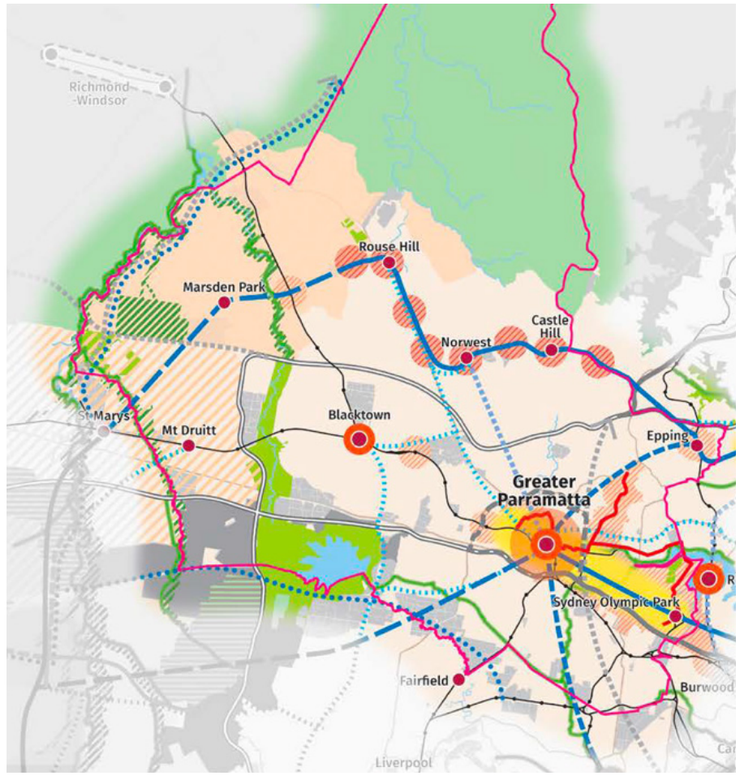
WENTWORTH POINT DCP 2004

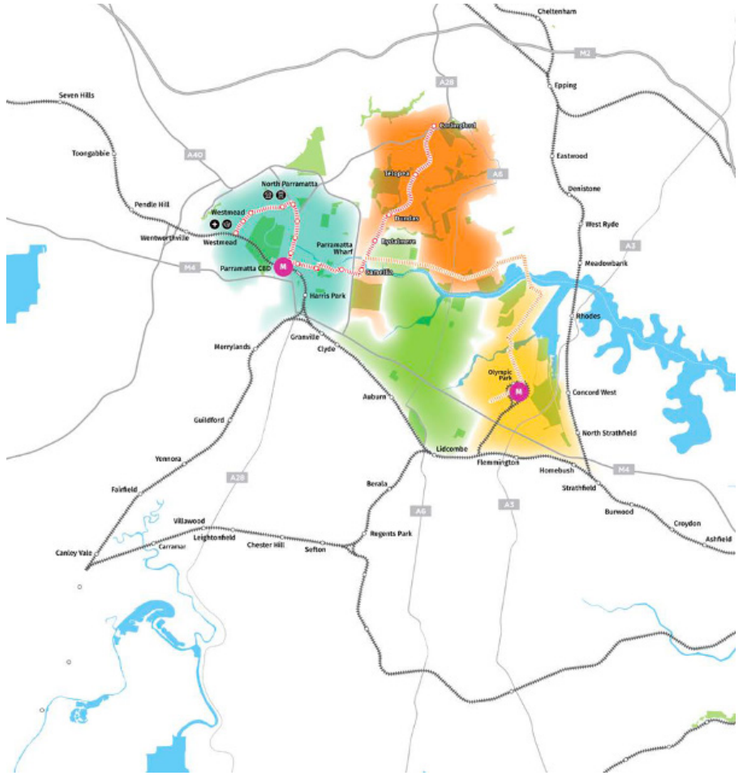
The Homebush Bay West DCP establishes objectives and controls for new development to deliver an attractive, appropriate, high amenity and high quality environment for residents, workers and visitors.

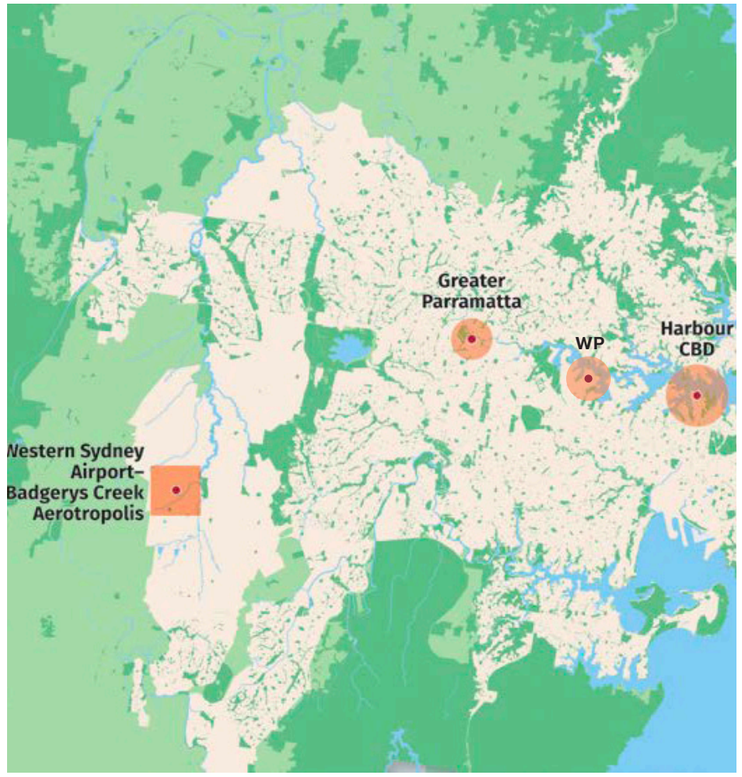
- **IDENTITY** – Create an identifiable character for Homebush BayWest
- **LAND USES** – Accommodate and locate appropriately a range and mix of uses within Homebush Bay West
- **STREET AND BLOCK STRUCTURE** – Create a street and block structure that optimises legibility, permeability and efficiency
- **OPEN SPACE NETWORK** – Create a network of public open spaces that is strongly linked to Sydney Olympic Parklands, the foreshore edge and the water, and provides for a range of recreational activities
- **ACCESSIBILITY** – Increase and enhance the opportunities for pedestrians and cyclists to access the precinct and to move safely and comfortably within the public domain
- **ENVIRONMENTALLY SUSTAINABLE DESIGN** –Incorporate ESD principles into all stages of design, including the design of public spaces, block and site layout and built form
- **BUILT FORM** – Provide sensitive and high quality architectural and landscape design that contributes positively to the character of the public domain
- **HOUSING CHOICE** – Support opportunities for a diverse community by promoting workplace and housing choice
- **RESIDENTIAL AMENITY** – Provide a high level of residential amenity, including outdoor spaces as well as within apartments.



URBAN CONTEXT







URBAN CONTEXT/ DISTRICT TRANSPORT NETWORKS

Wentworth Point is located within the Central City District and sits within Australia's largest urban renewal area being the Greater Parramatta and Olympic Peninsula Growth Area.

SYDNEY METRO WEST

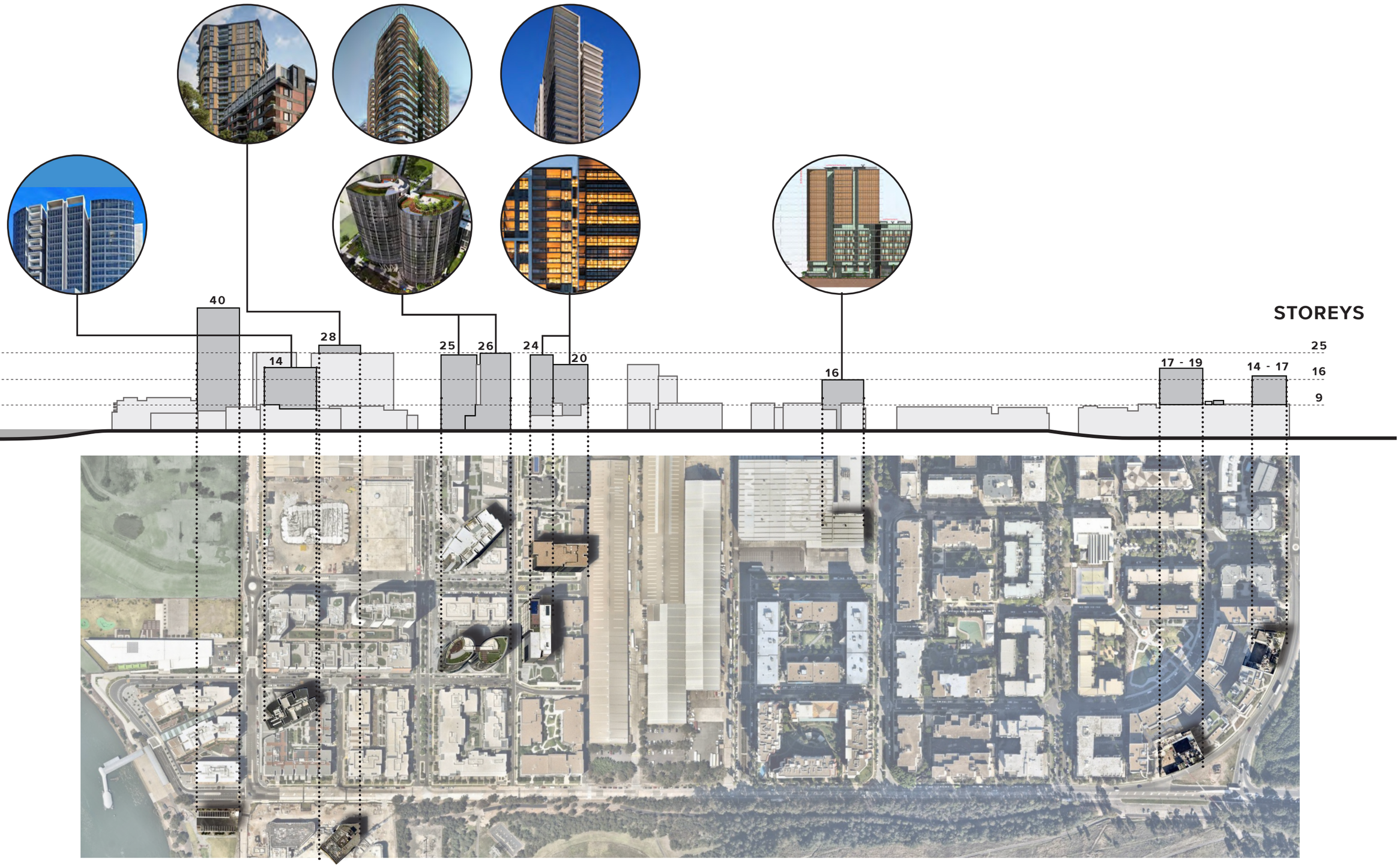
Future transport investment in the planned Sydney Metro West and the proposed Light Rail Stage 2 will significantly improve connectivity.

GREEN SPACES:

Wentworth Point is framed by significant natural amenity both in the form of parklands and river front recreation routes and investment has been identified to enhance these.

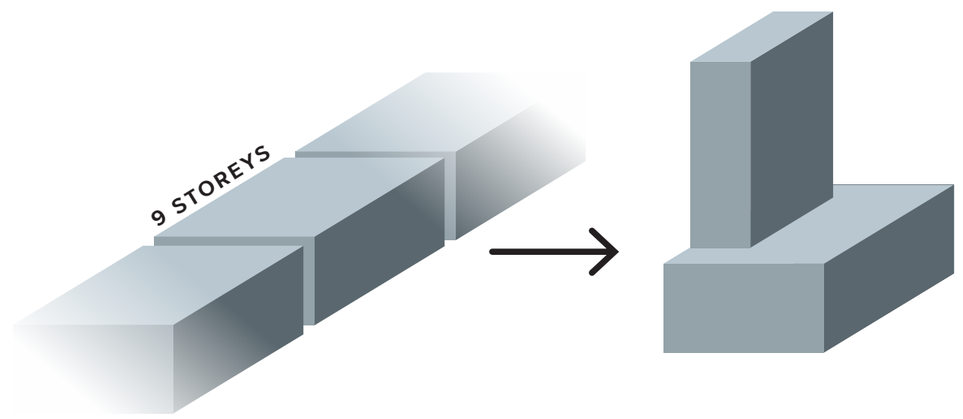
Sydney Olympic Park is also home to a major lifestyle, entertainment and sporting offer.

NEIGHBOURHOOD CONTEXT



NEIGHBOURHOOD CONTEXT

ABOVE 25 STOREYS
ABOVE 15 STOREYS
9 STOREYS
PRECINCT GATEWAY



DCP 2004

HYBRID FORM:
TOWER + PODIUM

BUILT FORM AND HEIGHT

The overall built form of Wentworth Point has evolved from a consistent height forming a perimeter block outcome (DCP 2004) to a Hybrid form with a street building and a tower form creating dispersed height and a dynamic skyline. This includes the approved 16 storey building at Baywater Drive, within the context of the southern end of Wentworth Point.

NEIGHBOURHOOD CONTEXT

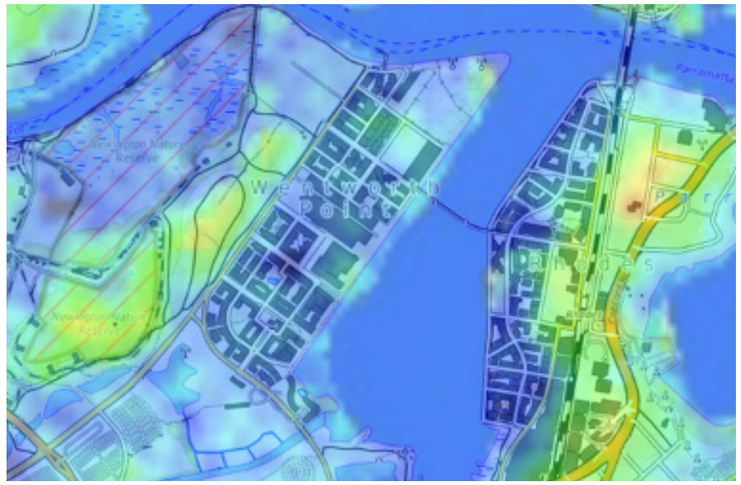
Towards SOPA

Wentworth Point Precinct F

Towards Rhodes

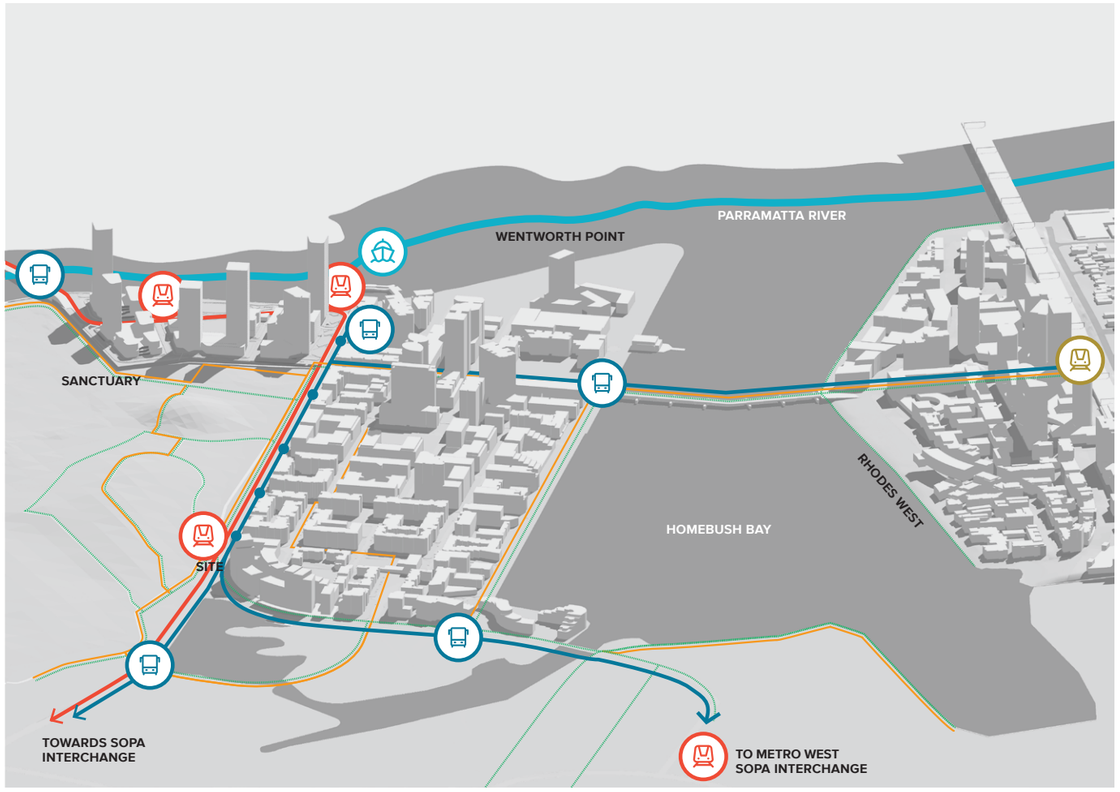
- Key vistas from the precinct include SOPA to the south, Parramatta City to the west and Sydney City to the east.
- The immediate context is evolving, from a consistent datum of 9 stories to more podium plus tower forms with a gradual transition in height toward the northern hub.
- Variation in height is creating interest in the built skyline and providing points of orientation and landmarks.

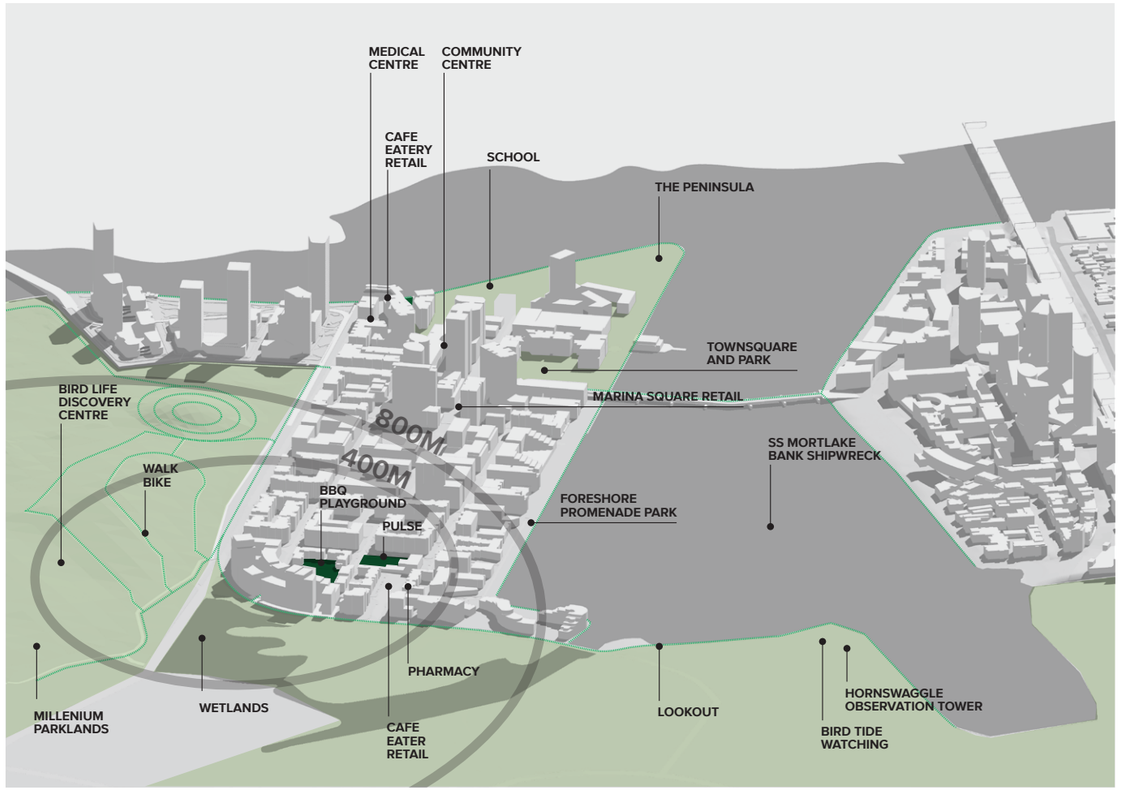
NEIGHBOURHOOD CONTEXT



- The surrounding context includes diverse natural amenity from Millenium and Woo la Ra Parklands to Narrawang Wetlands and Newington Armory, to the Parramatta River
- Topography transitions from flat land to hills with high points of AHD 29 metres at the Millenium Marker
- Landscape varies from waterways to the east and south, wetlands and tree canopies to the west

NEIGHBOURHOOD CONTEXT/ TRANSPORT NETWORKS





FERRY
BIKE PATH
PEDESTRIAN PATH
LIGHT RAIL
PROPOSED LIGHT RAIL STATION
BUS STOP
TRAIN STATION

Bike / Pedestrian Paths

TRANSPORT NETWORKS

Wentworth Point is located within the Greater Parramatta and Olympic Peninsula Growth Area which is benefiting from a number of significant public transport infrastructure investments including:

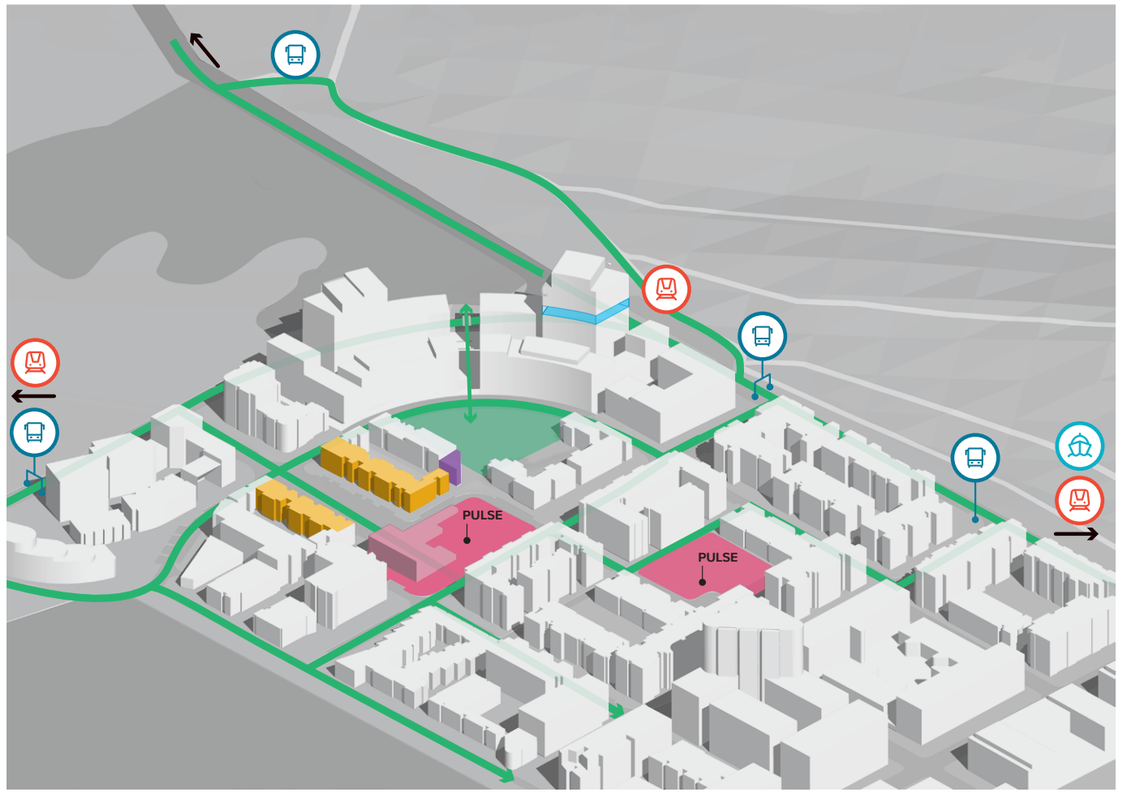
- Parramatta light rail
- Sydney Metro West

GREEN SPACE / PARKS, PUBLIC AMENITIES

Wentworth Point is located within a dense cycling and walking green network connected to a larger (regional) recreational infrastructure.

Public and semi-public/communal facilities promote “Urban Villages” where residents can gather in localised and intimate spaces to break down perceived anonymity of neighbours and promote chance encounters.

SITE CONTEXT



PULSE
RETAIL / CAFE
SKY CLUB
BAY PARK
CLUB ONE
PEDESTRIAN

CONNECTIVITY

One The Waterfront is well connected to a network of sustainable transport modes including walking, cycling and public transport with direct accesses to buses, connecting with major networks for trains and ferries.

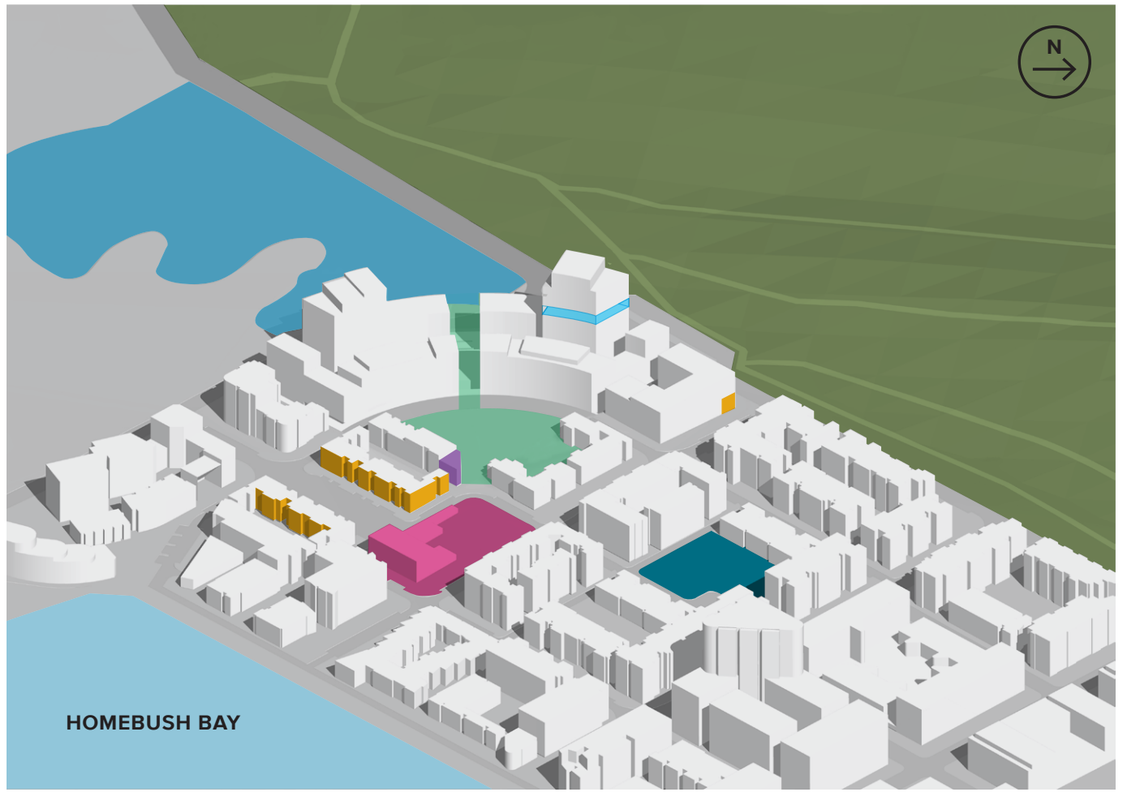
The OTW precinct will also benefit with improved transport access including the potential to be within walking distance of one of the future light rail stations and the opportunity for future metro interchange at Olympic Park.

MOTORISED VEHICLES
IN
OUT
PEDESTRIAN / BICYCLE

NOISE AND TRAFFIC

The site is at the intersection of Bennelong Parkway and Hill Road, two major entry gateways to Wentworth Point. The 8m landscaped setbacks allows for noise attenuation on those streets.

SITE CONTEXT



RETAIL / COMMERCIAL
POOL / TENNIS
OUTDOOR POOL
BAY PARK
MILLENIUM PARKLANDS
CLUB ONE
SKY CLUB

SURROUNDINGS

The site is directly opposite vast Parklands comprised of Haslams Creek and Millennium Parklands. Breaking the continuous street wall will enhance the connection between Bay Park and the larger network of Recreational Parklands.

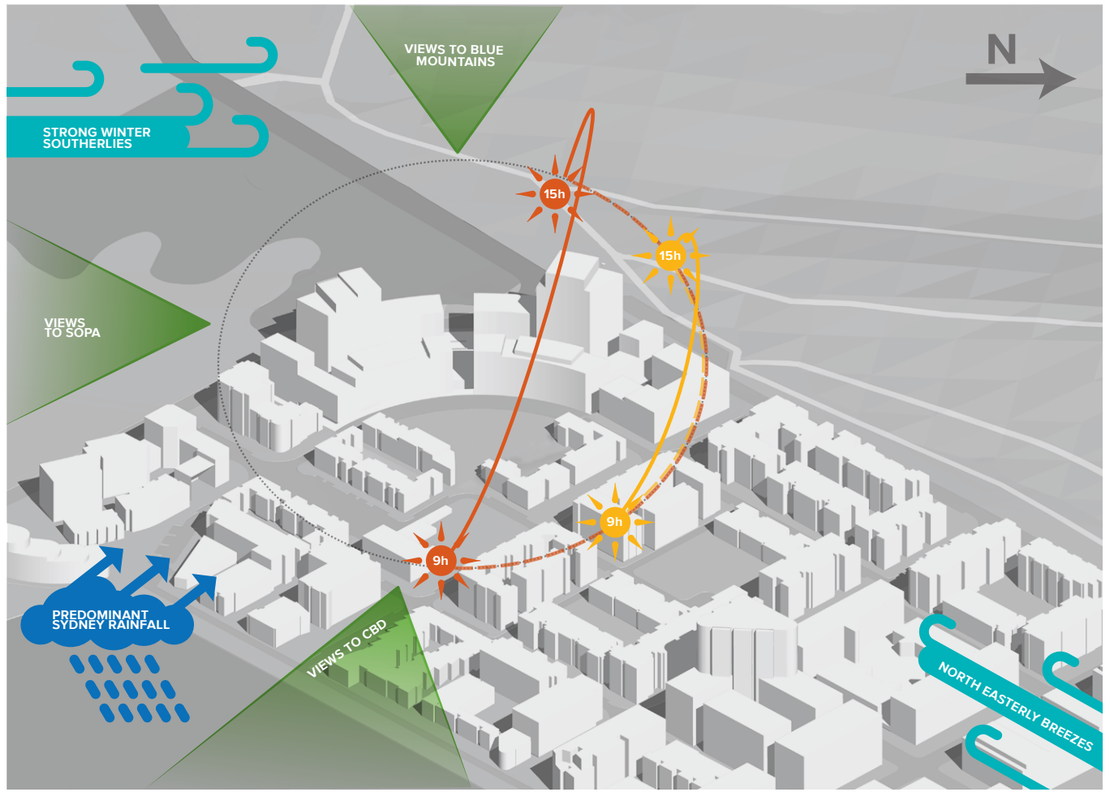
16 STOREYS & ABOVE

BUILDING HEIGHTS

The predominant height form for the precinct is a continuous 9 Storeys datum.

The podium + tower form is evolving across the precinct including on the nearby site with the approved 16 storey tower for 6-8 Baywater Drive.

SITE CONTEXT



CLIMATE

The site benefits from generous open space including the public Bay Park and Communal Courtyards.

The proposed modified envelopes for the remaining unbuilt stages will allow increased sunlight into the courtyards, and will match the current solar access to Bay Park.

Refer to Shadow Analysis on page 39 - 43 for detail

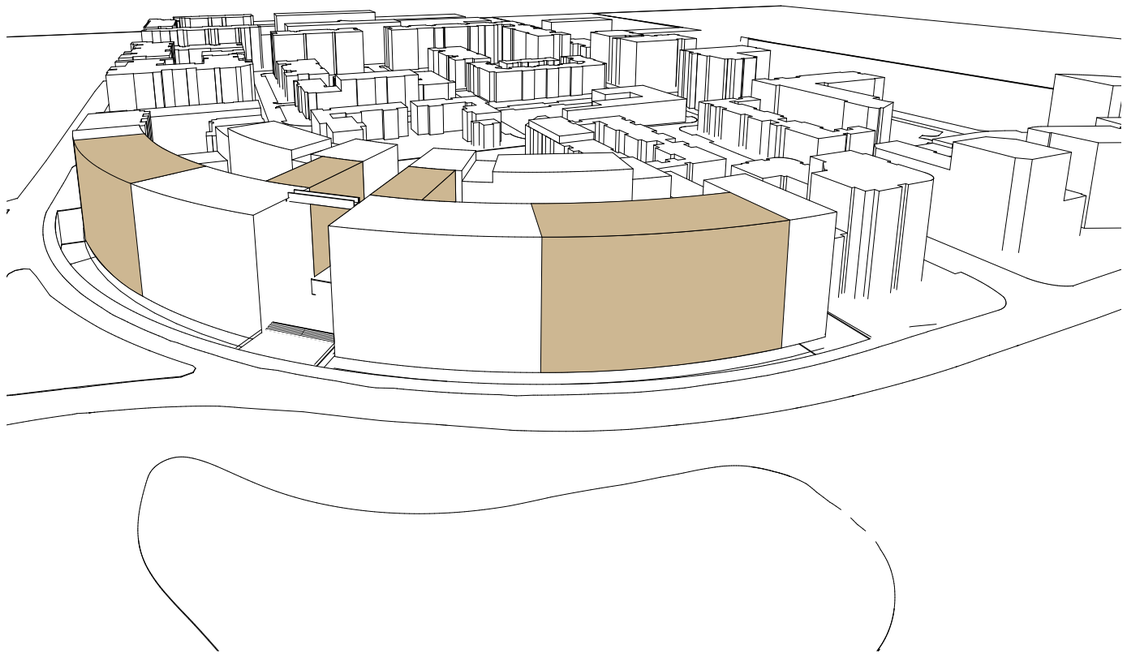
The remaining unbuilt stages of One The Waterfront face Bennelong Parkway, and are oriented approximately in a north/north-west direction along their long axis, beneficial for solar access and outlook.

New building separations will allow breezes from the north east to permeate the whole site while articulated building forms can be used break down stronger winds.

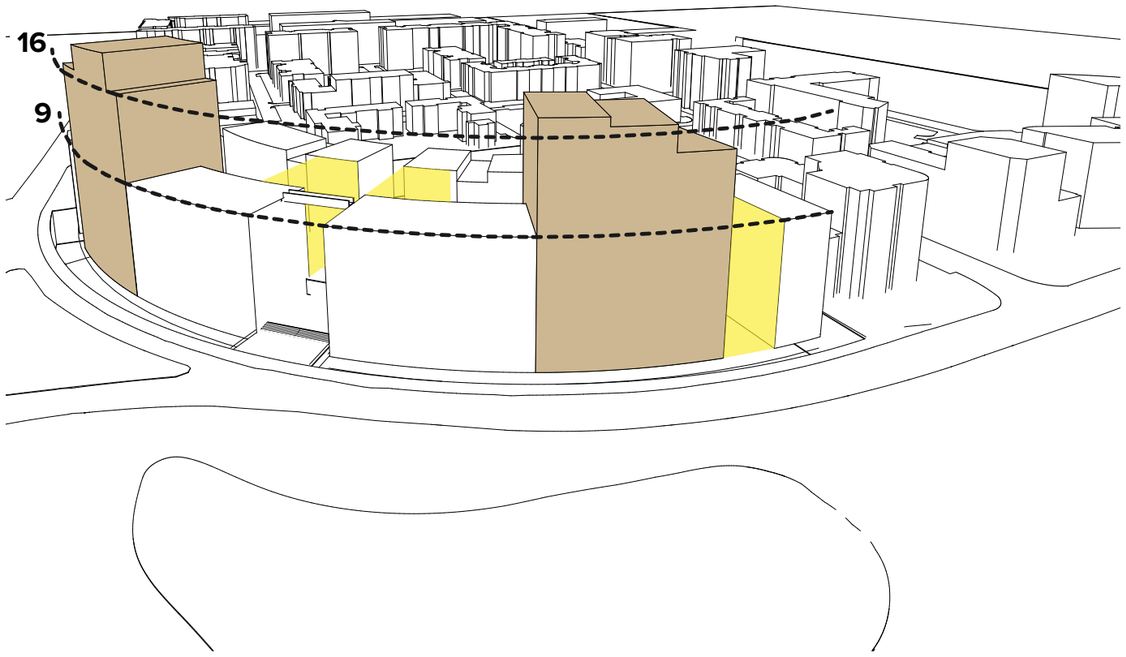
03. MERIT BASED ANALYSIS

MASSING

HEIGHT & DENSITY



Approved / Proposed Envelope



Approved / Proposed Envelope

New open space after amending envelope

2013 APPROVED CONCEPT PLAN

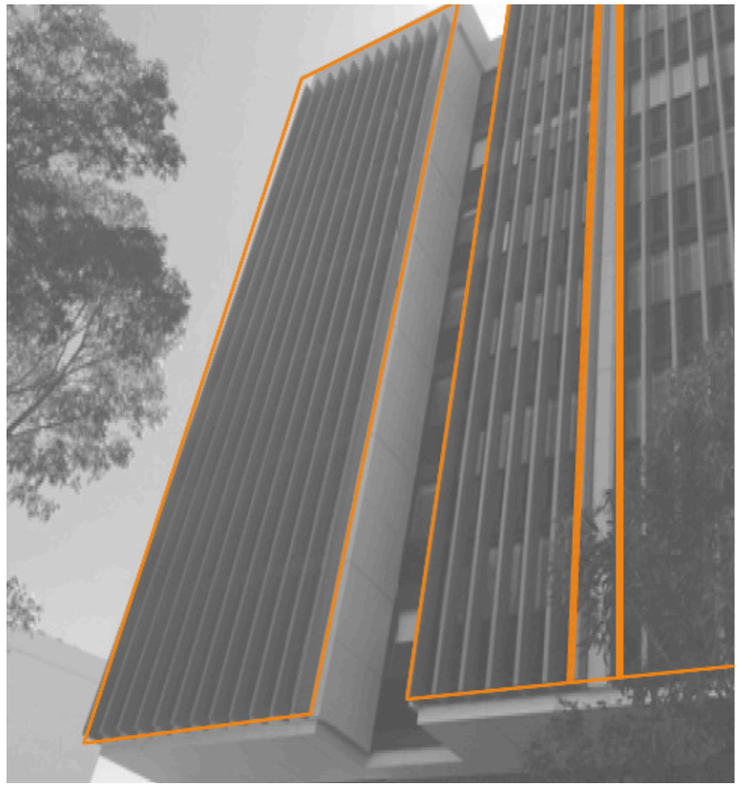
Under the 2013 approved Concept Plan, the envelopes for the site correspond to continuous 7 - 9 storey volumes parallel to Bennelong Parkway. The approved unbuilt envelopes are shown in gold in this diagram.

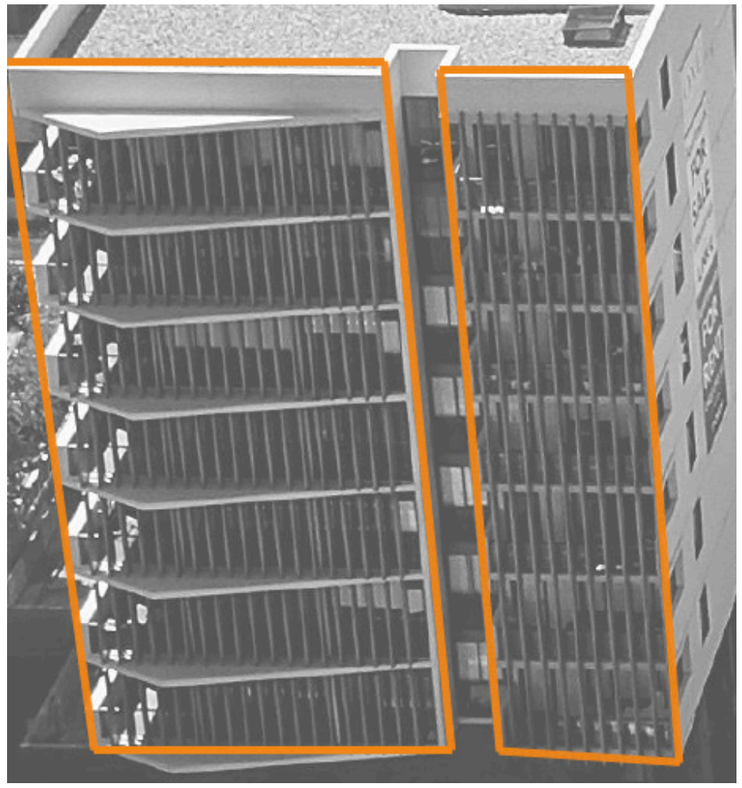
2020 PROPOSED MODIFICATION

The proposed buildings are stepped in height ranging from 14-17 storeys for Building C and 16-19 storeys for Building F, to provide for varied building forms, façade modulation and visual interest.

MASSING

STREETSCAPE & CONTEXT





EXISTING CONTEXT

The modulation of the existing façade is enhanced with strong vertical architectural elements.

The façade steps within the development along the curved Bennelong parkway.

MASSING

STREETSCAPE & CONTEXT

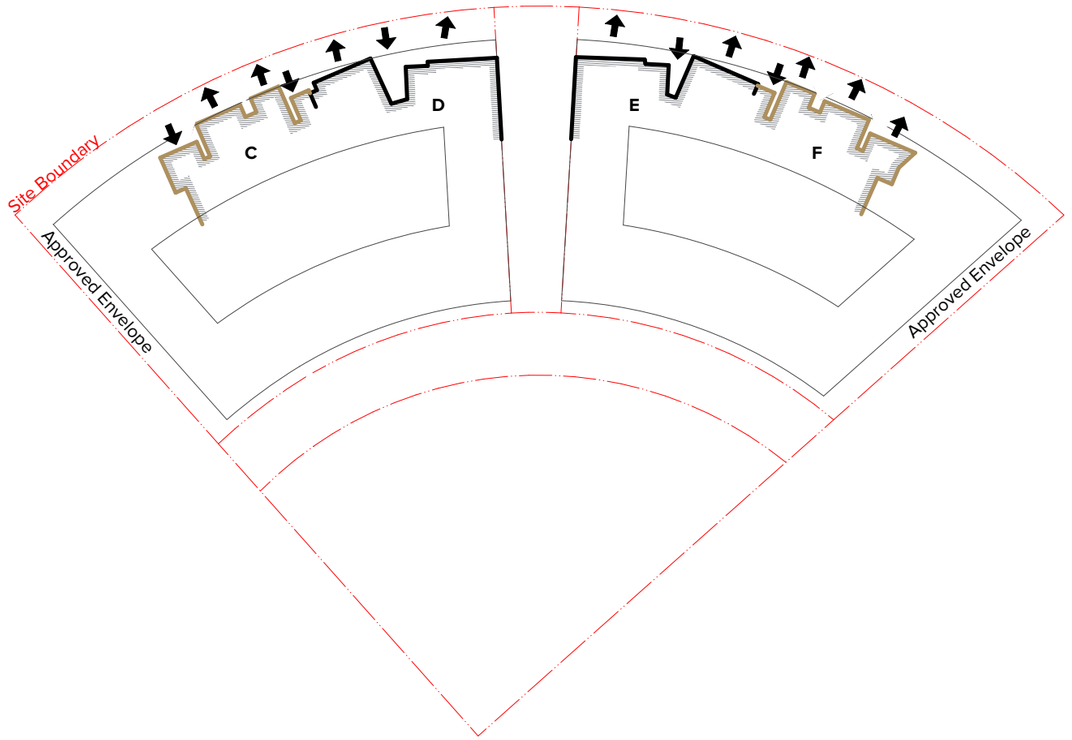
The built form of the approved DAs within the development has varied from the original concept envelope. The variation has allowed for stepping in the facade alignment, and substantial indents in the built form along Bennelong Parkview, that results in an improved street scape and urban design outcome. Similarly the realised built form has opened up view lines into the central walkway from Bay park to Bennelong parkway that improves the permeability of the scheme.

The proposed amendments to the concept envelope and the suggested illustrative building forms are consistent with the design intent of the previous approved DAs. The new buildings are in keeping with their adjoining context and will marry in the remainder of the scheme. The proposed buildings also open up view lines from the central courtyards to Bennelong Parkway, and their stepped building form will further enhance the articulation of the precinct's streetscape. The proposed illustrative plans improve the building separation distances already achieved within the completed component of the scheme, and in excess of the ADG minimum requirements. This guarantees equal or better ADG compliance for the whole scheme including sunlight, cross ventilation and open area.

EXISTING CONTEXT

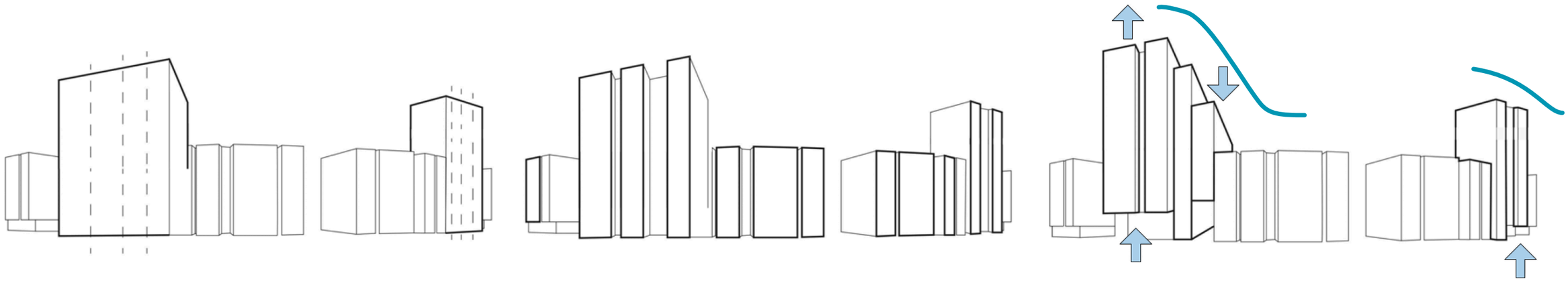
Strong verticality of the existing built form is embraced by the expression of the new proposal.

The building elements step around the radius of Bennelong Parkway, extending the existing pattern of façade articulation.



MASSING

STREETSCAPE & CONTEXT



APPLYING THE CONTEXTUAL GRID
Vertical Expression

ADAPTATION OF FACADE MODULATION
Façade articulation (varying planes and stepping)

ADJUSTMENT OF MASSING EMBRACING THE NATURAL AND BUILT CONTEXTUAL ELEMENTS.

Drawing from surrounding natural and built context, variation in height responds to the transitioning topography, landscape, and built forms. Heights of the new buildings gradually increase toward the north in stepped forms, referencing the topography and vegetation beyond Hill Road and the transitioning heights of Wentworth point, creating interesting skylines and opportunities for landscaped roof terraces.

FLOOR SPACE

APPROVED FSA

2013

LEVEL	BUILDING C	BUILDING F
8	635	628
7	635	628
6	635	628
5	635	628
4	635	628
3	635	628
2	635	628
1	635	628
GROUND	635	246
	5,345	**5,270**

Total Floor Space Area	*10,615*
Approved FSA	*16,006*

SHORTFALL FSA

	5,391m²

2020 PROPOSED MODIFICATION

The Approved Floor Space Area for 23 Bennelong Avenue site under the current Concept Plan is 50,045m² of Floor Space Area.

The Built Floor Space Area for DA1, DA2 and DA3 amounts to a total of 34,039m²of Floor Space Area.

Under the 2013 approved Concept Plan, the remaining approved FSA for the buildings C and F equals 16,006m².

2020

LEVEL	BUILDING C	BUILDING F
18	-	191
17	-	256
16	128	438
15	390	509
14	391	509
13	535	509
12	545	509
11	545	520
10	545	520
9	545	0
8	549	520
7	549	520
6	549	520
5	549	520
4	549	520
3	549	520
2	549	520
1	423	397
GROUND	135	193
	7,819	**8,187**

Total Floor Space Area	*16,006*
Approved FSA	*16,006*

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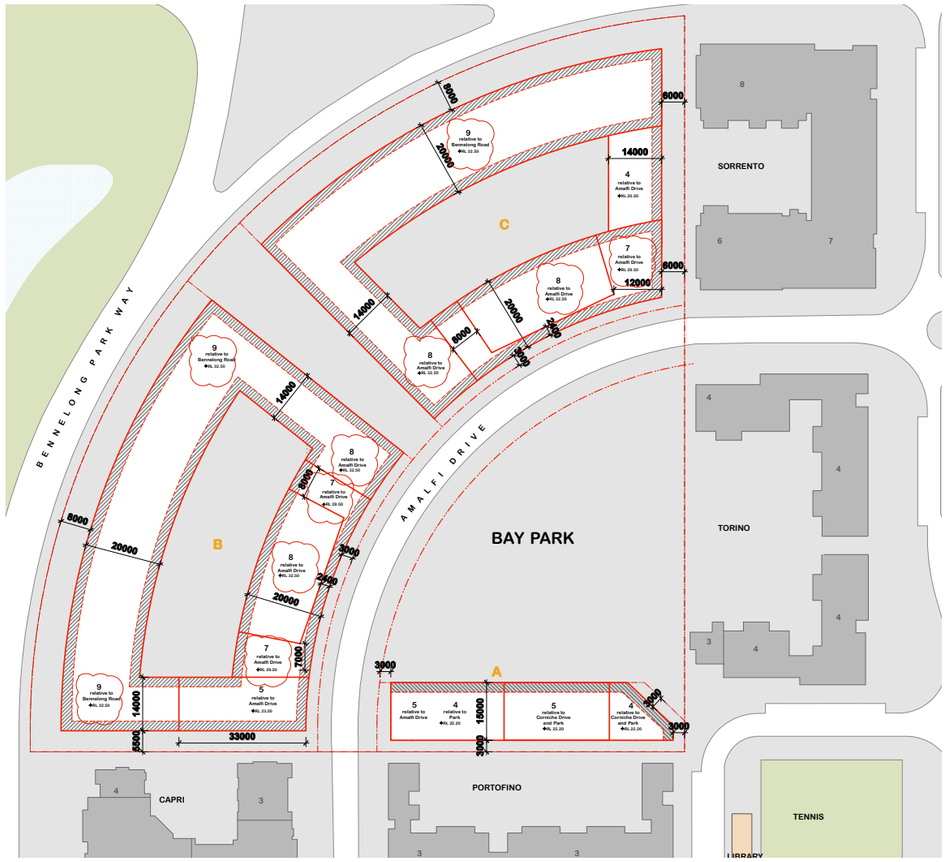
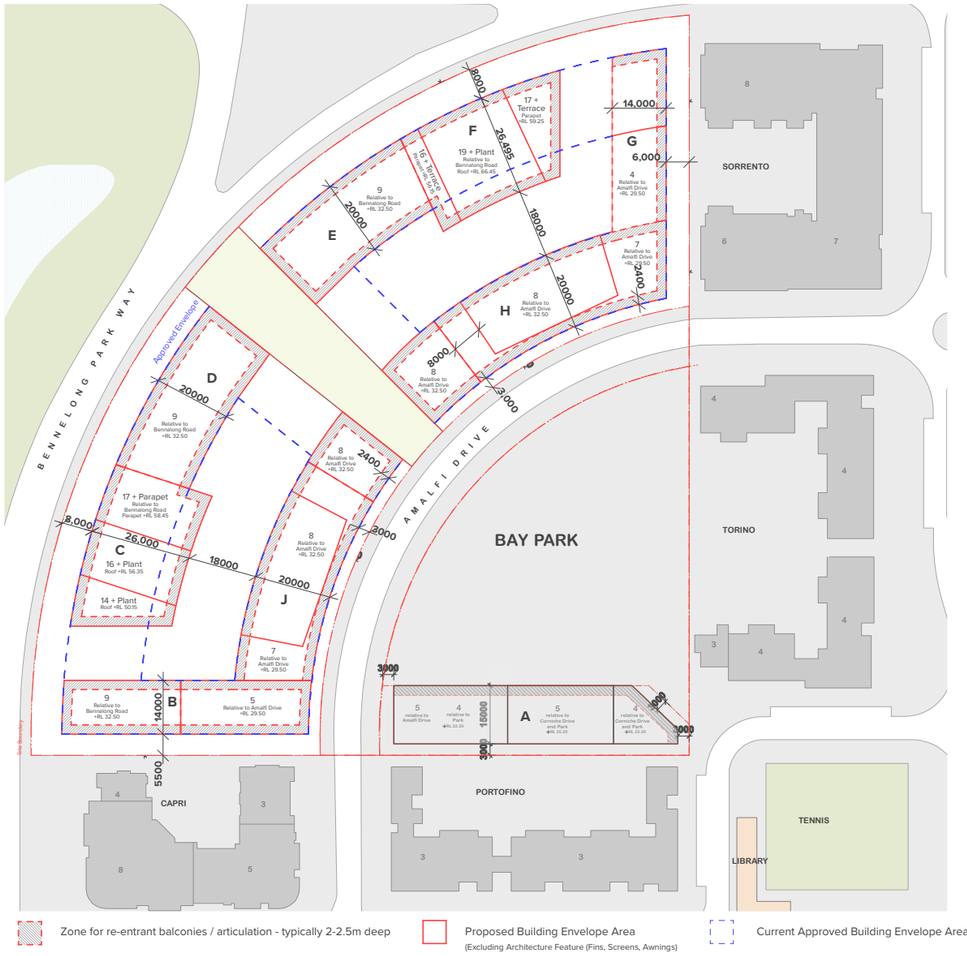
FLOOR SPACE
ENVELOPE





2013 APPROVED CONCEPT PLAN

The 2013 Approved Concept Plan is comprised of multiple buildings with heights ranging from 7 to 9 storeys, organised around enclosed courtyards and the new neighbourhood park: Bay Park.

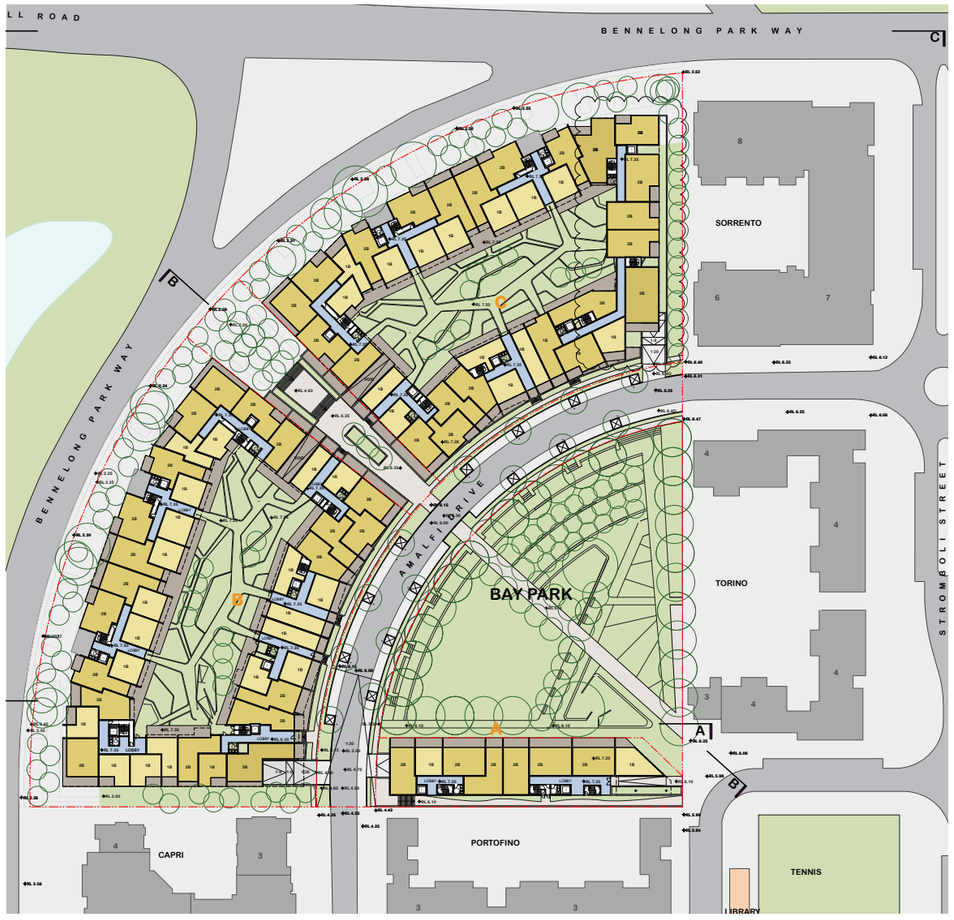
2020 PROPOSED MODIFICATION

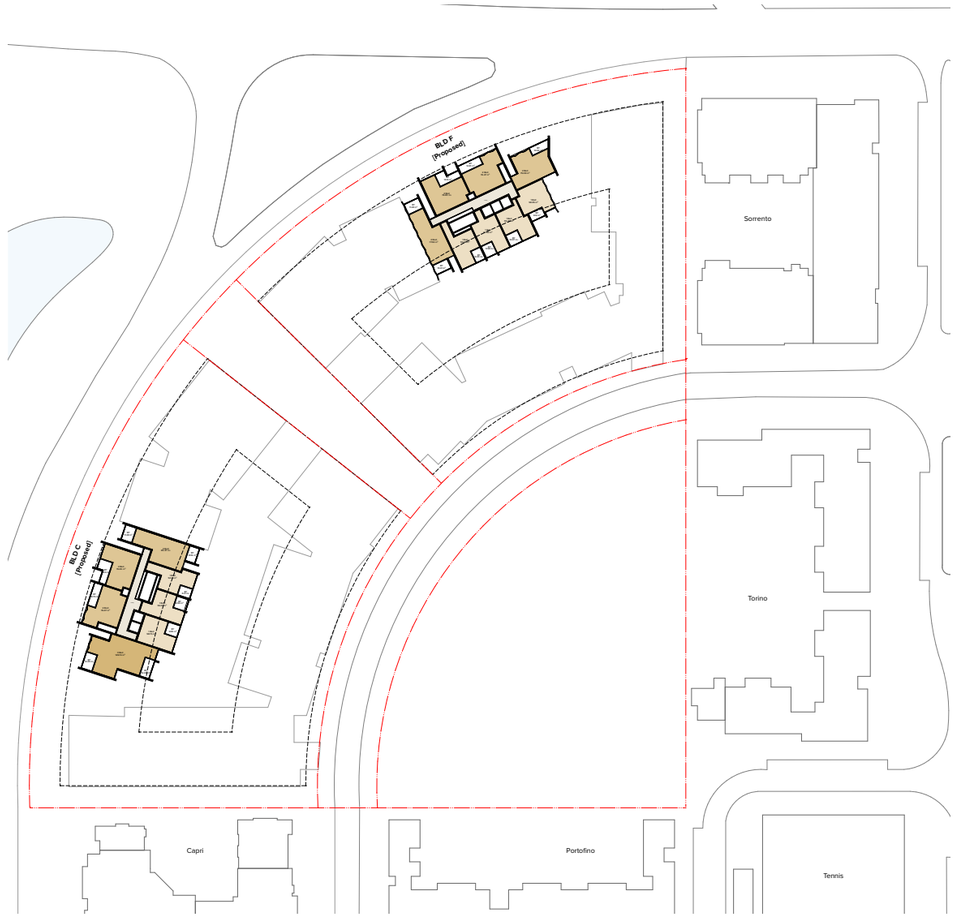
The proposed modification for the sites C and F offers two buildings with heights ranging from 14 to 19 storeys, organised around open courtyards.

The proposed Building Envelope Area (BEA) exclude façade articulation zones.

FLOOR SPACE

POTENTIAL YIELD, PARKING





2013 APPROVED CONCEPT PLAN

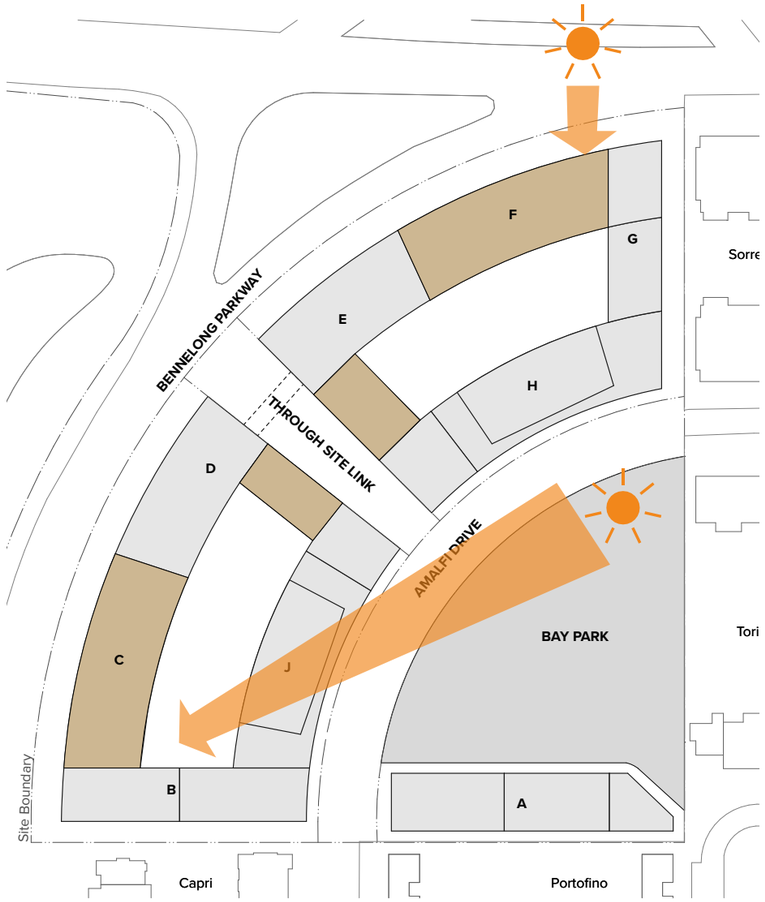
A notional apartment mix for the sites of 209 x 1 bedroom, 405 x 2 bedroom and 27 x 3 bedroom apartments, with a common basement with a car parking capacity for 850 cars for approximately 641 apartments. The remaining unbuilt portion includes 99 x 1 bedroom apartments, 71 x 2 bedroom apartments and 6 x 3 bedroom apartments

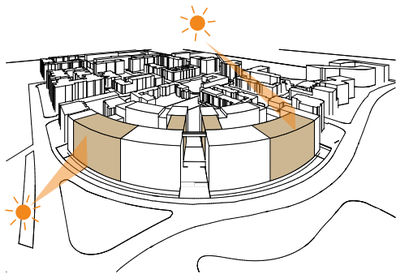
2020 PROPOSED MODIFICATION

The revised apartment mix is 192 x 1 Bedroom, 452 x2 Bedroom and 41 x 3 Bedroom units (685 total). The common basement will include provision for 895 car spaces.

AMENITY

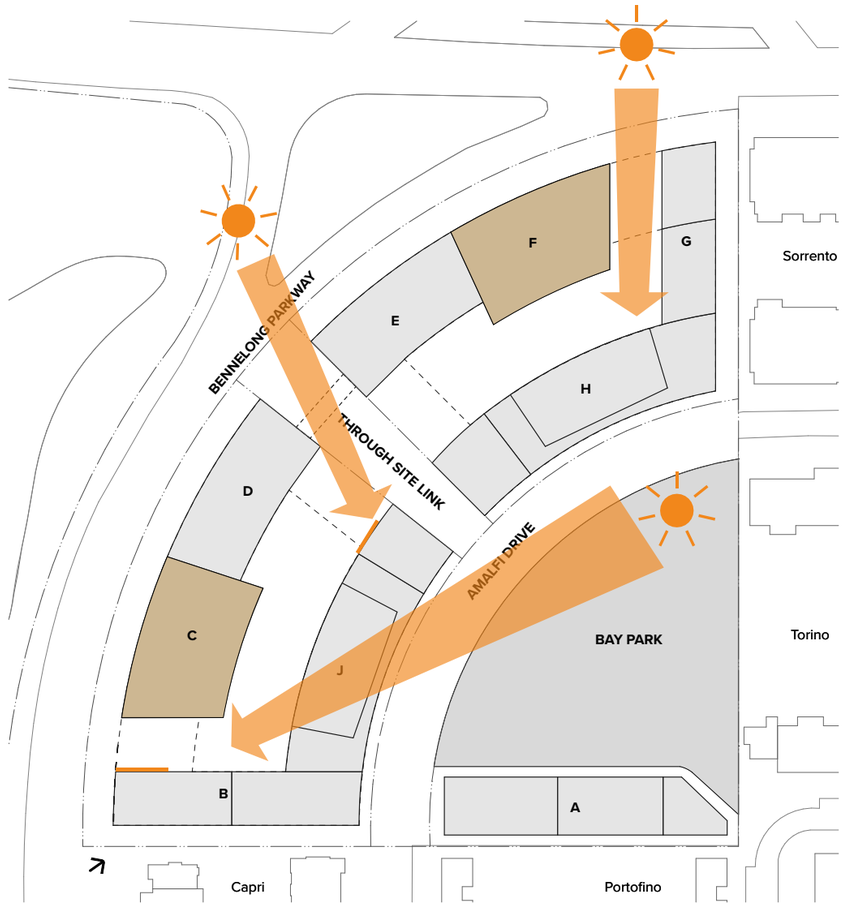
EXISTING DWELLINGS & COMMUNAL OPEN SPACE - SOLAR ACCESS

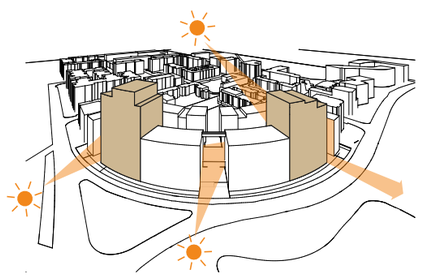




2013 APPROVED ENVELOPE

The remaining approved unbuilt envelope will fully enclose the courtyards and block daylight and direct sunlight from the courtyards and adjacent apartments.



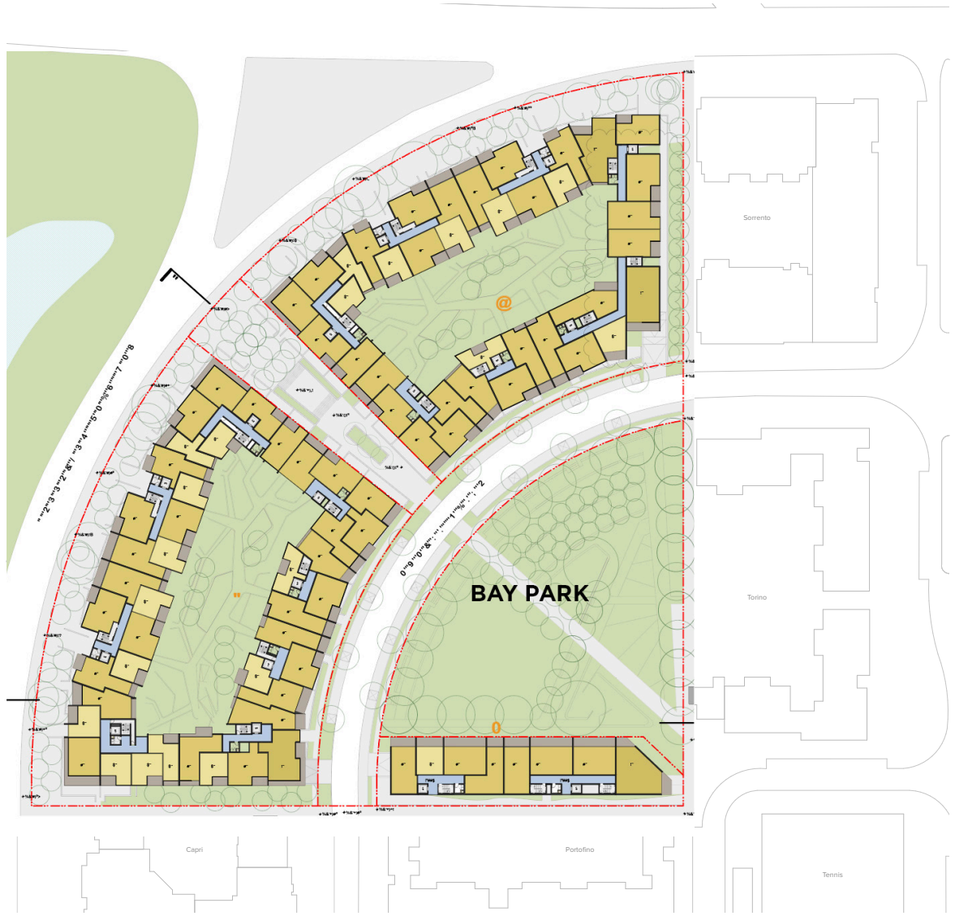


2020 PROPOSED ENVELOPE

The proposed amended Building Area Envelopes (BEA) provide greater opportunities for daylight access and direct solar access to the courtyards, adjacent existing apartments, and new apartments.

AMENITY

NEW DWELLINGS - APARTMENT DESIGN GUIDELINES



2013 ILLUSTRATIVE PLAN

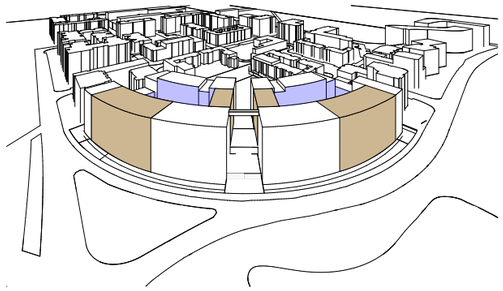
The Current Approved illustrative Plan arranges apartments around two enclosed courtyards, with the two building forms mirrored about the through site link. The original concept was designed under the RFDC.

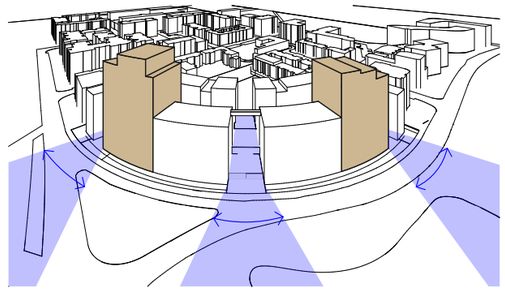
There are approximately 176 remaining unbuilt apartments comprising of 99 x 1 bedroom apartments, 71 x 2 bedroom apartments, beds, and 6 x 3 bedroom apartments. The current layouts would need to be revised to meet ADG requirements including for natural cross ventilation criteria and maximum % apartments receiving no direct sunlight.

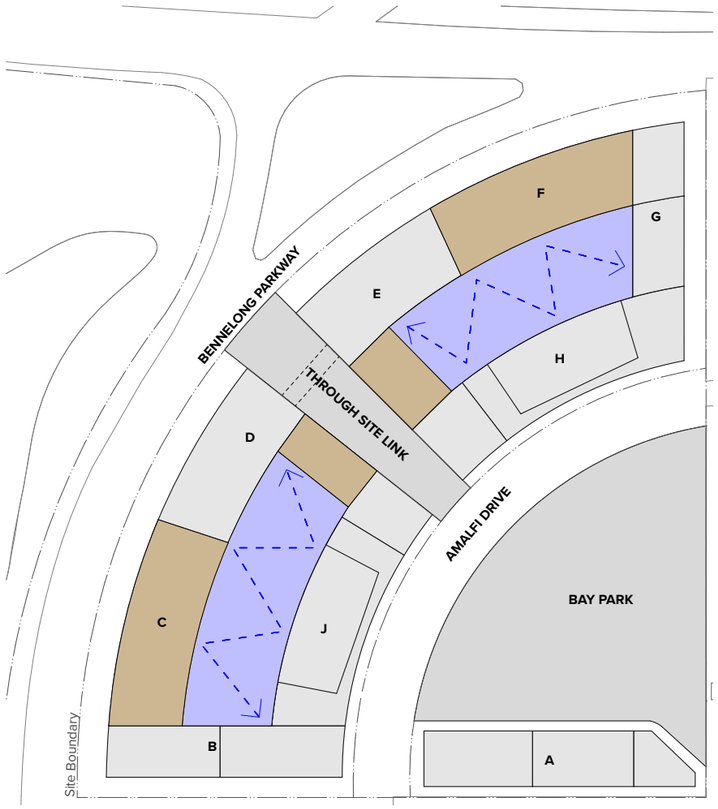
The proposed changes to the envelope provide increased opportunities for private and communal space amenity including daylight, direct sunlight, natural cross ventilation, and variation in apartment typologies. Refer to the following pages:

MERIT SUMMARY

NEW DWELLINGS - OUTLOOK

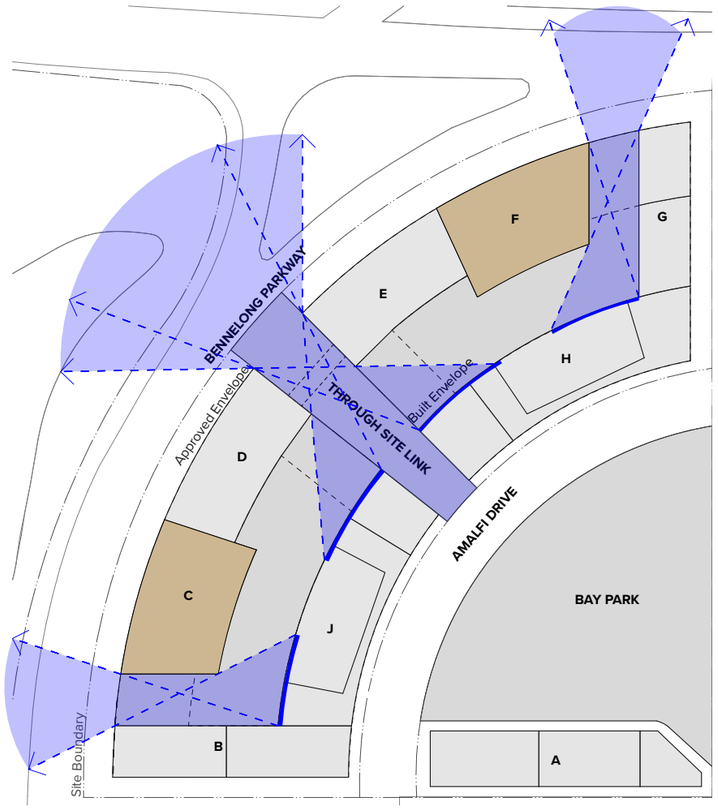






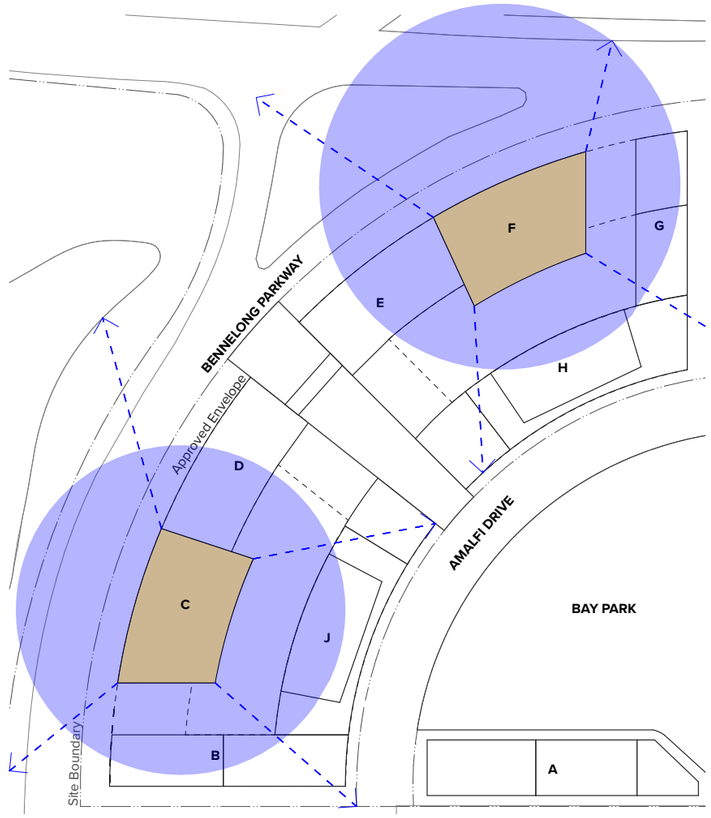
2013 APPROVED CONCEPT PLAN

Enclosed courtyards offering no outlook to the surrounding wetlands and parklands.



2020 PROPOSED MODIFICATION
TYPICAL

40 Existing apartments gain views to the wetlands/parklands and an additional 48 apartments have widened outlook within the courtyards.



2020 PROPOSED MODIFICATION
ABOVE LEVEL 9

Upper units benefit from 360* views towards Parramatta City, the Blue Mountains, Sydney CBD and Sydney Olympic Park.

MERIT SUMMARY

NEW DWELLINGS - OUTLOOK

City View Water View Greenery View

2020 PROPOSED MODIFICATION

Increased Outlook for Existing Residences and Communal Courtyard. Substantial district views open up across the wetlands and parklands to the south west, and towards SOPA and Parramatta. Many apartments also benefit from improved outlook into the substantially increased courtyards. and into the thought site link connecting Bay Park to Bennelong Parkway

City View Water View Greenery View

2020 PROPOSED MODIFICATION

Increased Outlook for New Residences of remaining stages. More apartments benefit from district views towards the south and west, also across Parramatta River and towards Sydney CBD

15.04.2020
DLCS Quality Endorsed Company ISO 9001:2015, Registration Number 20476
Nominated Architect: Nicholas Turner 6695, ABN 86 064 084 911

INDICATIVE VIEWS

Sydney Olympic Park (South)

Wetlands (South West)

Parramatta (West)

Parklands (North West)

Bay Park and Wentworth Point (North)

Parramatta River (East)

Bay Park (East)

Parramatta River and Sydney CBD (North East)

15.04.2020
DLCS Quality Endorsed Company ISO 9001:2015, Registration Number 20476
Nominated Architect: Nicholas Turner 6695, ABN 86 064 084 911

PUBLIC & COMMUNAL AMENITY

BUILDING SEPARATION

Approved Envelope Remaining Proposed Envelope As Built Condition

BUILDING F
ILLUSTRATIVE SIDE SEPARATION

2013 APPROVED CONCEPT PLAN

The approved concept plan envelopes provided building separation across the courtyards in excess of RFDC/ADG requirements. For the DA approved plans, building separation between D&J, E&H, varies between 12 - 19.3m

2020 PROPOSED MODIFICATION

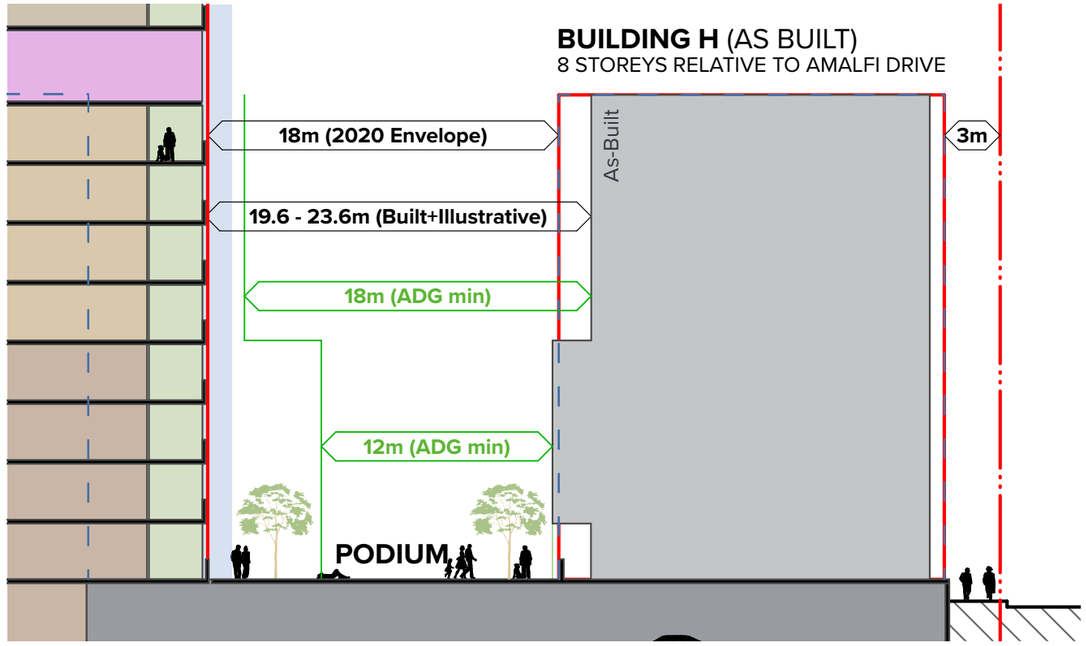
The redistribution of floor space into the taller envelopes allow for new separations between buildings B and C, F and G, D and J and E and H.

The amended forms allow for a significant increase in the courtyard areas.

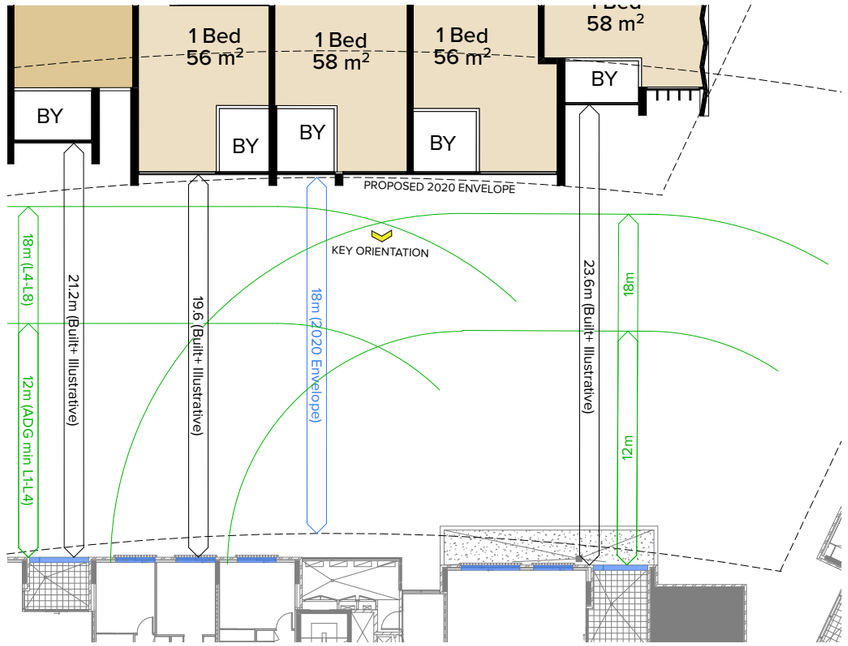
The illustrative plan demonstrates that the new apartments key orientation will be toward Bennelong Parkway or the Courtyard. Similarly, the existing apartments are oriented towards Bennelong Parkway or the site boundaries. At the side separations distances are min 9m from the existing building to solid walls/screens or min 12m between openings.

PUBLIC & COMMUNAL AMENITY

BUILDING SEPARATION



BUILDING F



BUILDING F
ILLUSTRATIVE COURTYARD SEPARATION

ADG REQUIREMENTS:

Up to 4 storeys:

- 12m between Habitable rooms/Balconies
- 9m between Habitable rooms/Non Habitable
- 6m between non-Habitable rooms

Up to 8 storeys:

- 18m between Habitable rooms/Balconies
- 12m between Habitable rooms/Non Habitable
- 9m between non-Habitable rooms

The 4 and 8 storey ADG seperation requirement is measured relative to the immediate podium or street level. The proposed envelope conforms to ADG minimum building separations, typically habitable/habitable across the courtyard and non-habitable/non-habitable at the side separations. The illustrative plan improves further on these separations, the distances will be more generous than the current as-built condition.

PUBLIC & COMMUNAL AMENITY

OPEN SPACE

2013 APPROVED CONCEPT PLAN

The courtyard area contained by the 2013 current approved envelope is 3,324 sqm. Total area is 12,696m2 of Communal open space including Bay Park, communal courtyard.

(49.6% of Site Area)

2020 PROPOSED MODIFICATION

GROUND LEVEL

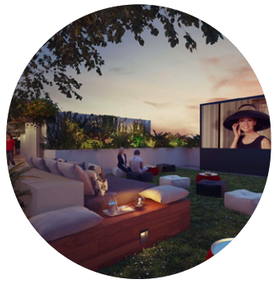
The courtyard area contained by the 2020 proposed envelope is 4,117 sqm, an increase of 24%. Total area is 13,499m2 of Communal open space including Bay Park, communal courtyard. (52.8% of Site Area)

2020 PROPOSED MODIFICATION

LEVEL 9

In addition to the open space at ground level, the proposal includes a Community Facility at L9 connecting to roof gardens above building D and E,

for the amenity of all residents.



PUBLIC & COMMUNAL AMENITY

CONNECTIVITY

2013 APPROVED CONCEPT PLAN

The through site link provides connections from Bay Park to Bennelong Parkway with views to the Wetlands.

The enclosed courtyards do not allow for further permeability.

2020 PROPOSED MODIFICATION

GROUND LEVEL

The proposed “open courtyard” design allows for greater permeability between Bennelong Parkway through to Bay Park. The courtyards are proposed to be accessed by residents with gated entries, with the public benefiting from the improved visual connections and passive surveillance of the open spaces. Additional gardens in the new side setbacks will include a portion of public open space

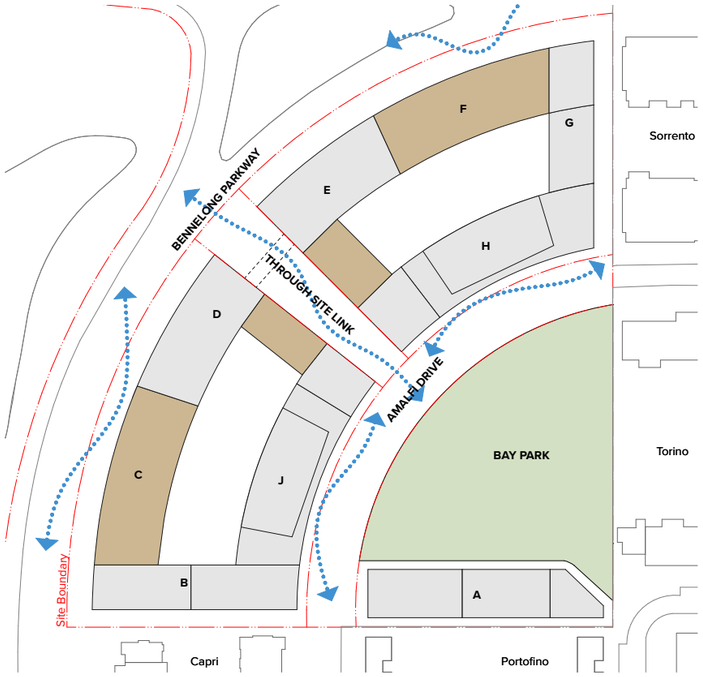
2020 PROPOSED MODIFICATION

LEVEL 9

Building F Skyclub will include additional landscaped undercover outdoor spaces, transitioning to the existing and enhanced roof gardens. The Sky Park will increase visual connections to the Narrawang Wetlands and provide learning opportunities regarding the Wetlands

PUBLIC & COMMUNAL AMENITY

VENTILATION

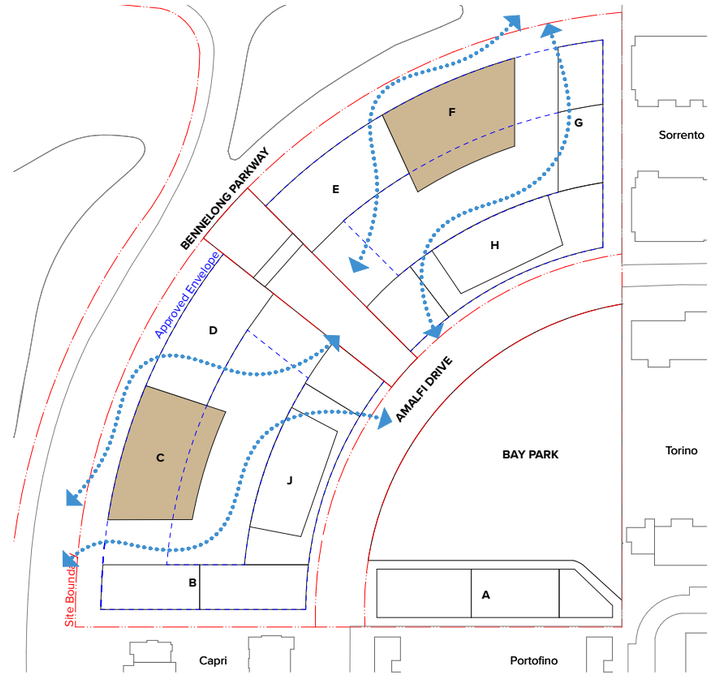


2013 APPROVED CONCEPT PLAN

The enclosed courtyard allows for limited air flow/ air permeability into the courtyards.

2020 PROPOSED MODIFICATION
TYPICAL

The proposed design with open courtyards provides greater ventilation into the communal open space giving a better thermal comfort into the rooms/ units facing those courtyards.

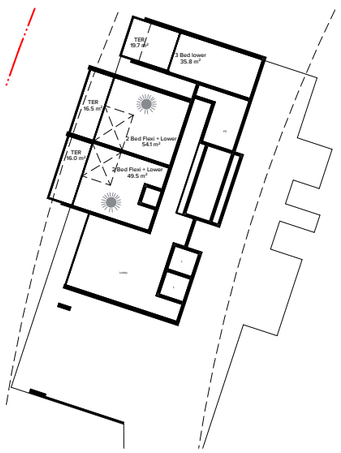


2020 PROPOSED MODIFICATION
ABOVE LEVEL 9

Units levels above L9 have full access to natural breezes.

MERIT SUMMARY

NEW DWELLINGS - BUILDING C

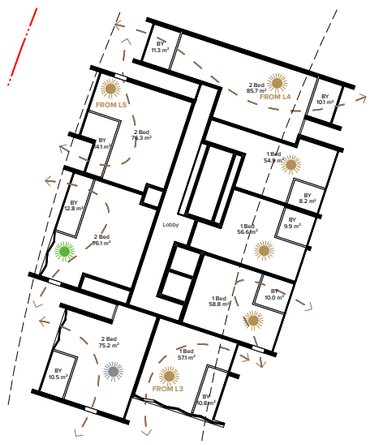


1 Ground Level

	< 15min - >2hrs Solar Access	0
	>2hr Solar Access	0
	No Direct Sunlight	2
	Cross Ventilation	0

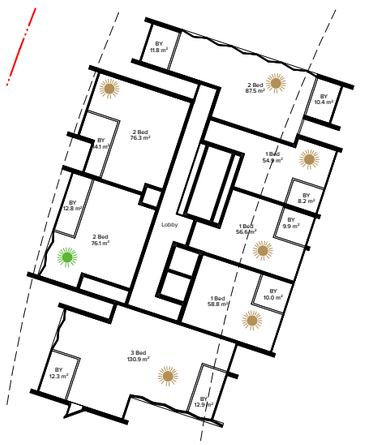
2 Level 01

	< 15min - >2hrs Solar Access	2
	>2hr Solar Access	1
	No Direct Sunlight	2
	Cross Ventilation	3



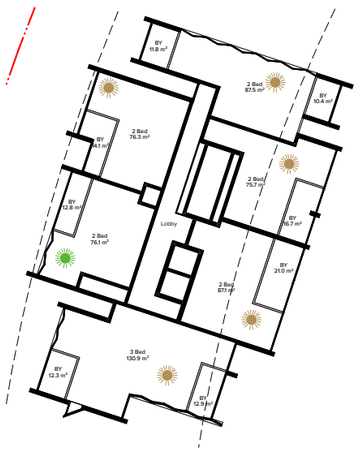
3 Level 02-08

	< 15min - >2hrs Solar Access	7
	>2hr Solar Access	36
	No Direct Sunlight	7
	Cross Ventilation	42



4 Level 09-12

	< 15min - >2hrs Solar Access	4
	>2hr Solar Access	24
	No Direct Sunlight	0
	Cross Ventilation	0

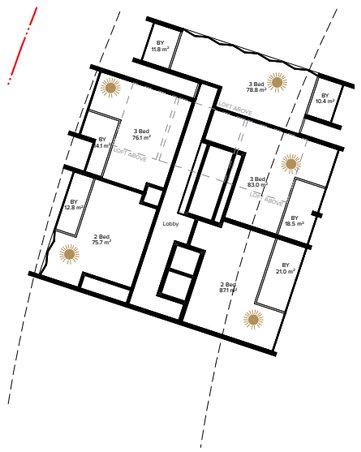


5 Level 13

	< 15min - >2hrs Solar Access	1
	>2hr Solar Access	5
	No Direct Sunlight	0
	Cross Ventilation	0

6 Level 14

	< 15min - >2hrs Solar Access	1
	>2hr Solar Access	4
	No Direct Sunlight	0
	Cross Ventilation	0



7 Level 15-16

	< 15min - >2hrs Solar Access	0
	>2hr Solar Access	5
	No Direct Sunlight	0
	Cross Ventilation	0

Apartment Amenity (With reference to Apartment Design Guide)

Building C

Solar Access (Objective 4A-1, Design Criteria 1)

Minimum % of apartments achieving 2 hours solar access: ≥ 70%
Actual % of apartments achieving 2 hours solar access: 75 apartments = 70%

Natural Ventilation (Objective 4B-3, Design Criteria 1)

Minimum % of apartments to be naturally ventilated: ≥ 60%
Actual % of apartments that are naturally ventilated: 45 apartments = 71%

No Direct Sunlight (Objective 4A-1, Design Criteria 3)

Minimum % of apartments achieving no direct sunlight: ≤ 15%
Actual % of achieving no direct sunlight: 11 apartments = 10%

Building C & F Total

Solar Access (Objective 4A-1, Design Criteria 1)

Minimum % of apartments achieving 2 hours solar access: ≥ 70%
Actual % of apartments achieving 2 hours solar access: 156 apartments = 71%

Natural Ventilation (Objective 4B-3, Design Criteria 1)

Minimum % of apartments to be naturally ventilated: ≥ 60%
Actual % of apartments that are naturally ventilated: 90 apartments = 74%

No Direct Sunlight (Objective 4A-1, Design Criteria 3)

Minimum % of apartments achieving no direct sunlight: ≤ 15%
Actual % of achieving no direct sunlight: 25 apartments = 11%

2020 PROPOSED MODIFICATION

The illustrative plans for the proposed modification of Building C & F achieves a minimum of 2h Solar access to 70.1 - 73.5% of apartments, no direct sunlight to 10.3 - 12.4% of apartments, and 70.3 - 71.4% cross ventilated apartments.

MERIT SUMMARY

NEW DWELLINGS - BUILDING F

1 Ground Level

< 15min - >2hrs Solar Access	0
>2hr Solar Access	3
No Direct Sunlight	0
Cross Ventilation	0

2 Level 01

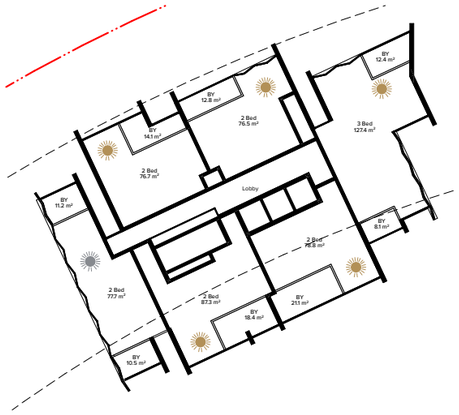
< 15min - >2hrs Solar Access	4
>2hr Solar Access	0
No Direct Sunlight	1
Cross Ventilation	3

3 Level 02-08

< 15min - >2hrs Solar Access	14
>2hr Solar Access	35
No Direct Sunlight	7
Cross Ventilation	42

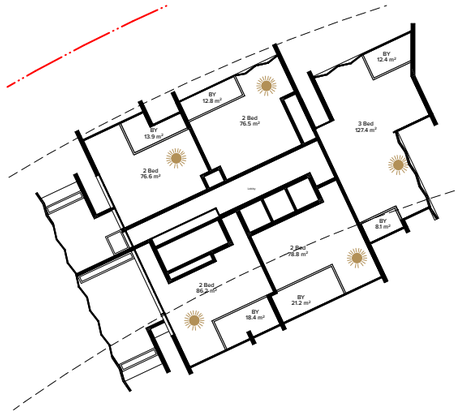
4 Level 10-13

< 15min - >2hrs Solar Access	4
>2hr Solar Access	24
No Direct Sunlight	4
Cross Ventilation	0



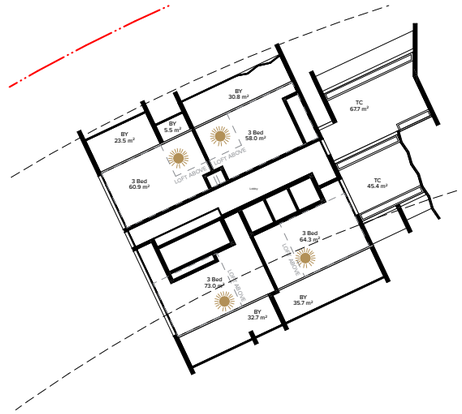
5 Level 14-15

< 15min - >2hrs Solar Access	0
>2hr Solar Access	10
No Direct Sunlight	2
Cross Ventilation	0



6 Level 16

< 15min - >2hrs Solar Access	0
>2hr Solar Access	5
No Direct Sunlight	0
Cross Ventilation	0



7 Level 17-18

< 15min - >2hrs Solar Access	0
>2hr Solar Access	4
No Direct Sunlight	0
Cross Ventilation	0

Apartment Amenity (With reference to Apartment Design Guide)

Building F

Solar Access (Objective 4A-1, Design Criteria 1)

Minimum % of apartments achieving 2 hours solar access: ≥ 70%
Actual % of apartments achieving 2 hours solar access: 81 apartments = 71%

Natural Ventilation (Objective 4B-3, Design Criteria 1)

Minimum % of apartments to be naturally ventilated: ≥ 60%
Actual % of apartments that are naturally ventilated: 45 apartments = 70%

No Direct Sunlight (Objective 4A-1, Design Criteria 3)

Minimum % of apartments achieving no direct sunlight: ≤ 15%
Actual % of achieving no direct sunlight: 14 apartments = 12%

Building C & F Total

Solar Access (Objective 4A-1, Design Criteria 1)

Minimum % of apartments achieving 2 hours solar access: ≥ 70%
Actual % of apartments achieving 2 hours solar access: 156 apartments = 71%

Natural Ventilation (Objective 4B-3, Design Criteria 1)

Minimum % of apartments to be naturally ventilated: ≥ 60%
Actual % of apartments that are naturally ventilated: 90 apartments = 74%

No Direct Sunlight (Objective 4A-1, Design Criteria 3)

Minimum % of apartments achieving no direct sunlight: ≤ 15%
Actual % of achieving no direct sunlight: 25 apartments = 11%

2020 PROPOSED MODIFICATION

The illustrative plans for the proposed modification of Building C & F achieves a minimum of 2h Solar access to 70.1 - 73.5% of apartments, no direct sunlight to 10.3 - 12.4% of apartments, and 70.3 - 71.4% cross ventilated apartments.

MERIT SUMMARY

NEW DWELLINGS - ADG

ADG Objective		2020 Proposed MOD4
2A, 3A	*Planning controls should be developed taking into account:* – *Sunlight and daylight access* – *Orientation and overshadowing* – *Natural ventilation* – *Visual and acoustic privacy* – *Ceiling heights* – *Communal open space* – *Deep soil zones* – *Public domain interface* – *Noise and pollution.* *Controls need to be tested to ensure the desired density and massing can be accommodated within the building height and setback controls* *Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context*	Refer to Report Section 02 Context Proposal addresses site conditions and context to achieve the required objectives
2B	*Building envelopes should be 25-30% greater than the achievable floor space in order to facilitate adequate building articulation and achieve amenity goals*	Building envelopes are 25-30% greater than the achievable floor space. Illustrative plans are highly articulated with good amenity
2C	*Ensure that building height controls respond to:* – *The desired number of storeys* – *The minimum floor to floor heights required for future building uses* – *The desired future scale and character of the local area* – *Landform and heritage*	Refer to Report Section 03 Merit Based Analysis - Massing Proposed heights respond to transitioning local context in natural and built environment and provide added amenity to public and communal open space and private dwellings

MERIT SUMMARY

NEW DWELLINGS - ADG

ADG Objective		2020 Proposed MOD4
2D	*Floor Space Ratios should be set which are consistent with achieving other parameters such as building height, building envelope and setbacks to:* – *Align with the optimum capacity of the site* – *Work with the desired density of the local area* – *Provide opportunities for building articulation* *The allowable gross floor area should only 'fill' approximately 70% of the building envelope*	The FSR is 1.96:1 with an Approved FSA for the site of 50,045 sqm Total floor space areas are less than 70% of the proposed BEA envelopes for Buildings C and F Refer to Report Section 03 Merit Based Analysis – Floor Space
2E, 4D	*Use a range of appropriate maximum apartment depths of 12-18m from glass line to glass line* *An apartment building depth of 10-18 metres is noted as appropriate. At a detailed level this dimension is held to refer most directly to 'street-wall' buildings with small or no building separation to their ends. Freestanding towers may be deeper but must demonstrate how satisfactory levels of daylight and natural ventilation are to be achieved (for example by the use of larger windows)* *The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity* *Environmental performance of the apartment is maximised*	Building depths are to achieve good daylight and natural ventilation and apartment depths to allow for design achieving 8m max from rear of kitchen to glass Apartments achieve high degree of amenity – daylight, ventilation and outlook with good access to midwinter sun and shading in summer
2F	*To ensure adequate amenity, especially daylight and privacy levels, minimum building separations are offered but may be varied to zero.* *For buildings 9 storeys and over (>25 metres):* – *24 metres between habitable rooms/balconies.* – *18 metres between habitable rooms/balconies and non-habitable rooms.* – *12 metres between non-habitable rooms. For buildings 5-8 storeys (13-25 metres):* – *18 metres between habitable rooms/balconies.* – *13 metres between habitable rooms/balconies and non-habitable rooms.* – *9 metres between non-habitable rooms. For buildings 3-4 storeys (12 metres or less):* – *12 metres between habitable rooms/balconies.* – *9 metres between habitable rooms/balconies and non-habitable rooms.*	Refer to Report Section 03 Merit Based Analysis – Building Separation Proposed Envelopes achieve ADG objectives for building separations

MERIT SUMMARY

NEW DWELLINGS - ADG

ADG Objective		2020 Proposed MOD4
2G, 2H	*Generally street setbacks should be between 1 and 10 metres although they may be reduced to zero where deemed appropriate.* *Side and rear setbacks are to be appropriate to the context and should assist in achieving amenity, especially adequate daylight.*	Street, side and rear setbacks appropriate to context and to assist in achieving amenity, especially adequate daylight
3B	*Building types and layouts respond to the streetscape and site while optimising solar access within the development* *Overshadowing of neighbouring properties is minimised during mid-winter*	Proposed building forms are sited to minimise overshadowing of open spaces and existing dwellings while maximising solar access to new dwellings Refer to Report Section 03 Merit Based Analysis – Amenity and Solar Access
3C	*Transition between private and public domain is achieved without compromising safety and security* *Amenity of the public domain is retained and enhanced*	Generous landscaping buffers are provided between the private and public domain Private open spaces are clearly defined. Apartments are located to provide passive surveillance to open spaces
3D	*An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping.* *Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting* *Communal open space is designed to maximise safety* *Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood*	Communal open space is more than double the minimum requirement of 25% of site area A range of functions are provided in the communal open spaces including public park and playground, transitional spaces and quiet zones with seating and outlook to the wetlands, communal landscaped gardens and roof gardens and outdoor cinema
3E	*Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality*	Deep soil is 21.3% of the overall site area, well in excess of the ADG minimum 6.25%

MERIT SUMMARY

NEW DWELLINGS - ADG

ADG Objective		2020 Proposed MOD4
3F	*Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy* *Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space*	Visual privacy is achieved between dwellings through apartment orientation and building separation, recessed balconies and screening
3G	*Building entries and pedestrian access connects to and addresses the public domain* *Access, entries and pathways are accessible and easy to identify* *Large sites provide pedestrian links for access to streets and connection to destinations*	Double height lobbies clearly identify building entries. Entries are framed by soft landscaping. Pathways connect to the through site link and public pedestrian and transport networks
3H	*Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes*	Vehicle entries are separated from pedestrian entries
3J	*Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas* *Parking and facilities are provided for other modes of transport* *Car park design and access is safe and secure* *Visual and environmental impacts of underground car parking are minimised* *Visual and environmental impacts of on-grade car parking are minimised* *Visual and environmental impacts of aboveground enclosed car parking are minimised*	Secure parking is provided for residents and visitors in basement parking Refer to traffic report for more information Vehicle entries are discrete and separated from pedestrian routes Carparks are below ground level or set back behind active building frontages at Bennelong Parkway (apartments and lobbies)
4A	*Optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space* *Daylight access is maximised where sunlight is limited* *Design incorporates shading and glare control, particularly for warmer months.*	70.1 - 73.5% of apartments in Building C and F achieve min 2 hours of solar access in mid-winter. Refer to illustrative plans - Amenity The proposal increases daylight into the courtyards Illustrative plans: recessed balconies and screening provides shading in summer

MERIT SUMMARY

NEW DWELLINGS - ADG

ADG Objective		2020 Proposed MOD4
4B	*All habitable rooms are naturally ventilated* *The layout and design of single aspect apartments maximises natural ventilation* *The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents*	Illustrative apartment layouts allow for all habitable rooms to be located on a façade and naturally ventilated The illustrative plans achieve no. of apartments achieving natural cross ventilation are in excess of ADG requirements
4C	*Ceiling height achieves sufficient natural ventilation and daylight access* *Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms* *Ceiling heights contribute to the flexibility of building use over the life of the building*	3.1m floor to floor heights allow to design for 2.7m high ceilings in habitable areas and 2.4m high ceilings in non-habitable areas Additional floor to floor heights are provided at LGF apartments and at Level 9 Sky Club to allow ceiling heights of at least 3.3m in habitable rooms
4D	*The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity* *Environmental performance of the apartment is maximised*	Illustrative apartment layouts allow for a variety of typologies with a high standard of amenity and sustainable design
4E	*Apartments provide appropriately sized private open space and balconies to enhance residential amenity* *Primary private open space and balconies are appropriately located to enhance liveability for residents* *Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building* *Private open space and balcony design maximises safety*	Balconies achieve minimum depths and areas for 1,2 and 3 bedroom apartments and are located for enhanced amenity to residents and contribute to overall architectural form. Private courtyards and roof gardens achieve 3m min depth and 15sqm min area
4F	*Common circulation spaces achieve good amenity and properly service the number of apartments* *Common circulation spaces promote safety and provide for social interaction between residents*	Illustrative plans: Maximum 8 apartments off a double-loaded core, with access to natural daylight and at least two lifts provided for >40 apartments Natural light is provided to common corridors/lobbies

MERIT SUMMARY

NEW DWELLINGS - ADG

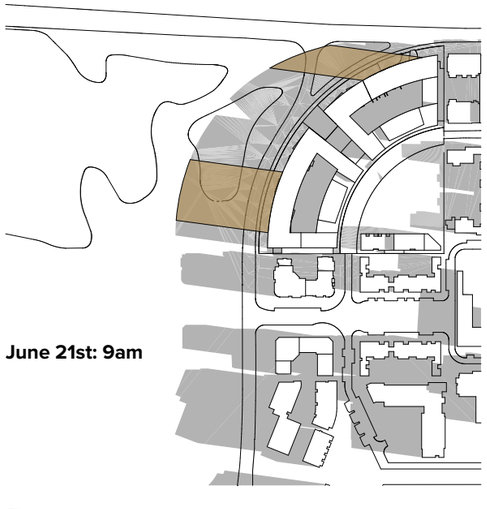
ADG Objective		2020 Proposed MOD4
4G	*Adequate, well-designed storage is provided in each apartment* *Additional storage is conveniently located, accessible and nominated for individual apartments*	Minimum storage provisions are achieved or exceeded within apartments Basement storage is provided
4H, 4J	*Noise transfer is minimised through the siting of buildings and building layout* *Noise impacts are mitigated within apartments through layout and acoustic treatments* *In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings* *Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission*	The proposal will provide improved conditions for existing and new apartments by siting many apartments further from Bennelong Parkway/ existing dwellings. Openings between building B and C, F and G and at the through site link allows for greater noise dissipation
4K	*A range of apartment types and sizes is provided to cater for different household types now and into the future* *The apartment mix is distributed to suitable locations within the building*	The proposed building form creates opportunities for a wider range of apartment typologies. Illustrative plans include a mix of 1, 2 and 3 bed apartments including double height apartments and apartments with roof terraces.
4L	*Street frontage activity is maximised where ground floor apartments are located* *Design of ground floor apartments delivers amenity and safety for residents*	Illustrative plans propose double height townhouse style apartments facing Bennelong Parkway at LGF/L1 and generous double height lobbies to Building C and F
4M, 4N	*Building facades provide visual interest along the street while respecting the character of the local area* *Building functions are expressed by the façade* *Roof treatments are integrated into the building design and positively respond to the street* *Opportunities to use roof space for residential accommodation and open space are maximised* *Roof design incorporates sustainability features*	The illustrative design draws from the existing context while introducing innovation and providing a high level of visual interest from the street and Bay Park Stepping forms with roof terraces and gardens create a highly articulated roof form The Sky Club at L9 is differentiated in the façade and landscape design

MERIT SUMMARY

NEW DWELLINGS - ADG

ADG Objective		2020 Proposed MOD4
4O, 4P	*Landscape design is viable and sustainable* *Landscape design contributes to the streetscape and amenity* *Appropriate soil profiles are provided* *Plant growth is optimised with appropriate selection and maintenance*	Landscaping is integral to the building including public, communal and private landscaped areas Landscape design varies corresponding with the differing location and functions
4Q	*Universal design features are included in apartment design to promote flexible housing for all community members* *A variety of apartments with adaptable designs are provided* *Adaptable housing should be provided in accordance with the relevant council policy* *Apartment layouts are flexible and accommodate a range of lifestyle needs*	The illustrative plans and carparking is designed for 15% adaptable apartments and 20% liveable apartments. All apartments are provided with lift access. Many apartments have ground/podium level garden terraces or roof terraces.
4U	*Development incorporates passive environmental design* *Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer* *Adequate natural ventilation minimises the need for mechanical ventilation*	The development proposes sustainable initiatives. Refer to Report Section 04 for more information

SOLAR ACCESS TO OPEN SPACES



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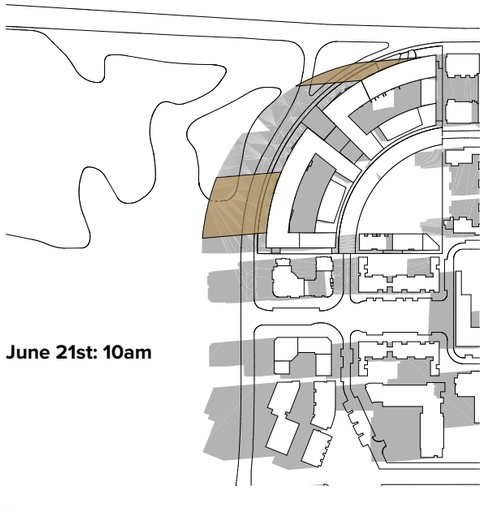

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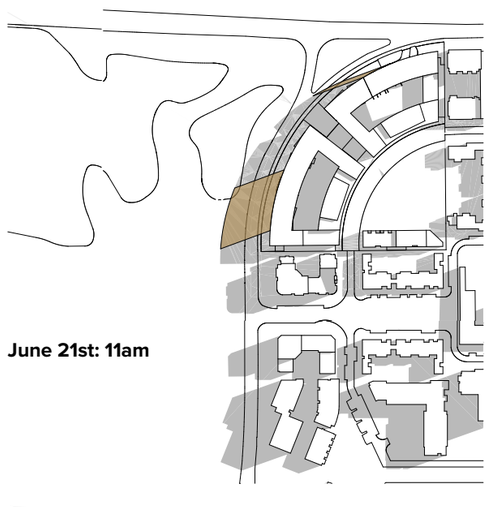

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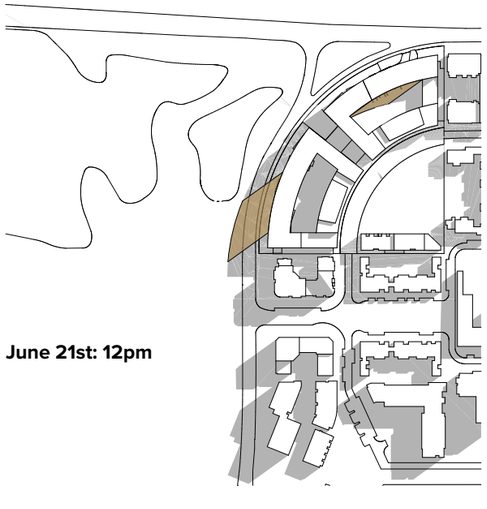

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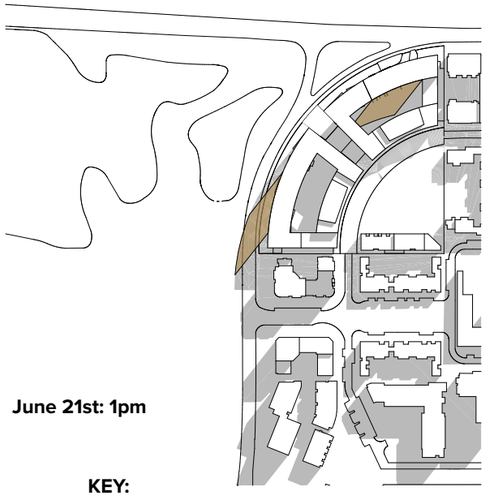

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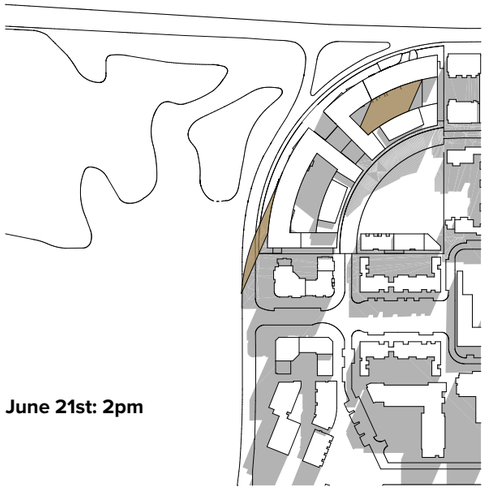

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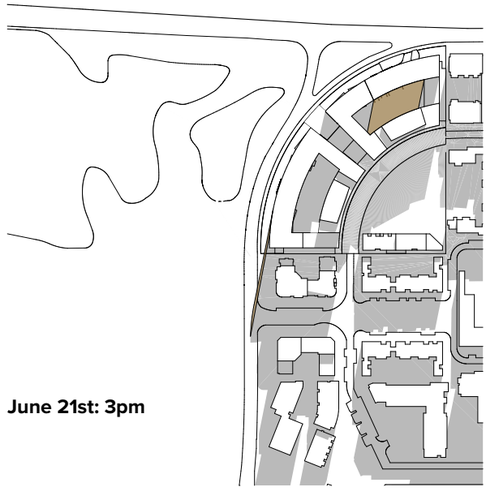


June 21st: 3pm

KEY:

Shadow of Remaining Un-built Envelope - Approved Concept Envelope

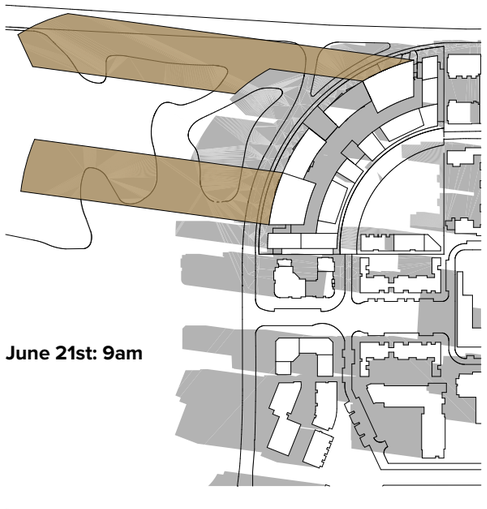
Shadows of Existing approved Concept Envelope and Neighbouring Buildings

2013 APPROVED CONCEPT PLAN - 9 STOREYS

Shadow study: overshadowing of outdoor open spaces

N

SOLAR ACCESS TO OPEN SPACES



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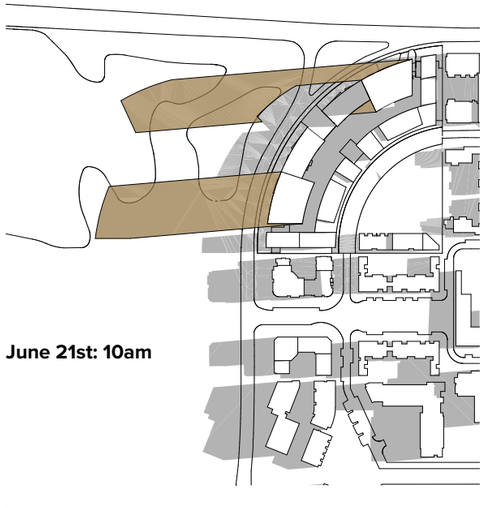

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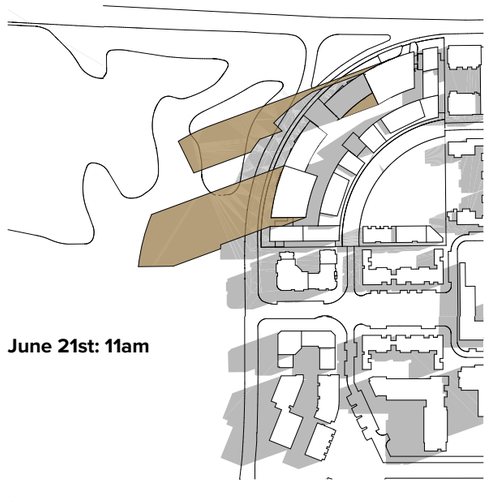

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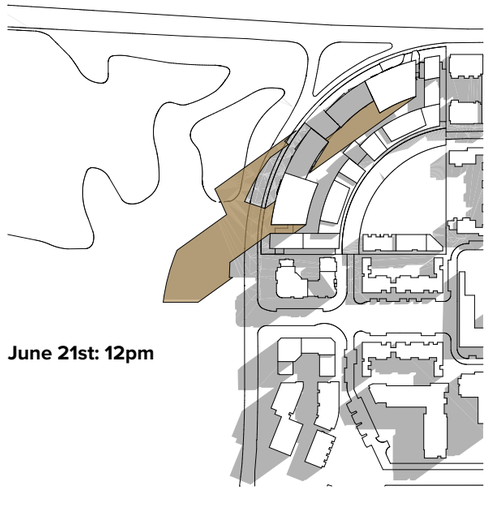

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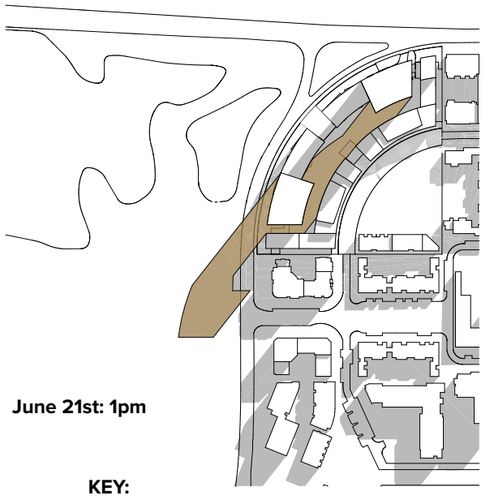

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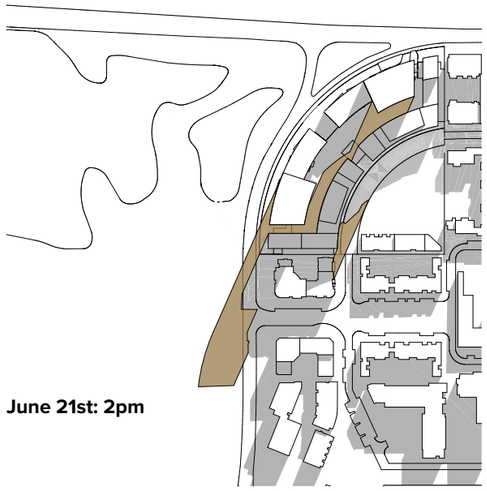

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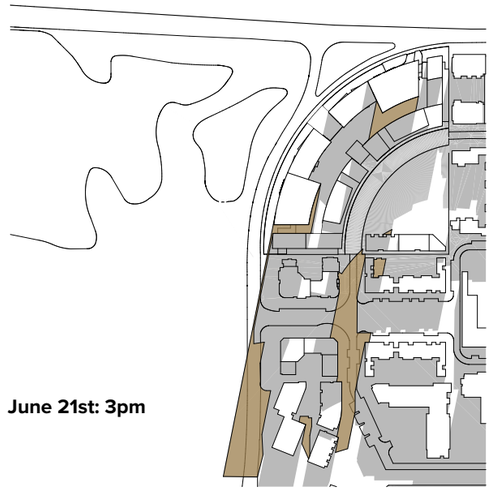


June 21st: 3pm

KEY:

Shadow of Remaining Un-built Envelope - 2018 Previous MOD 4

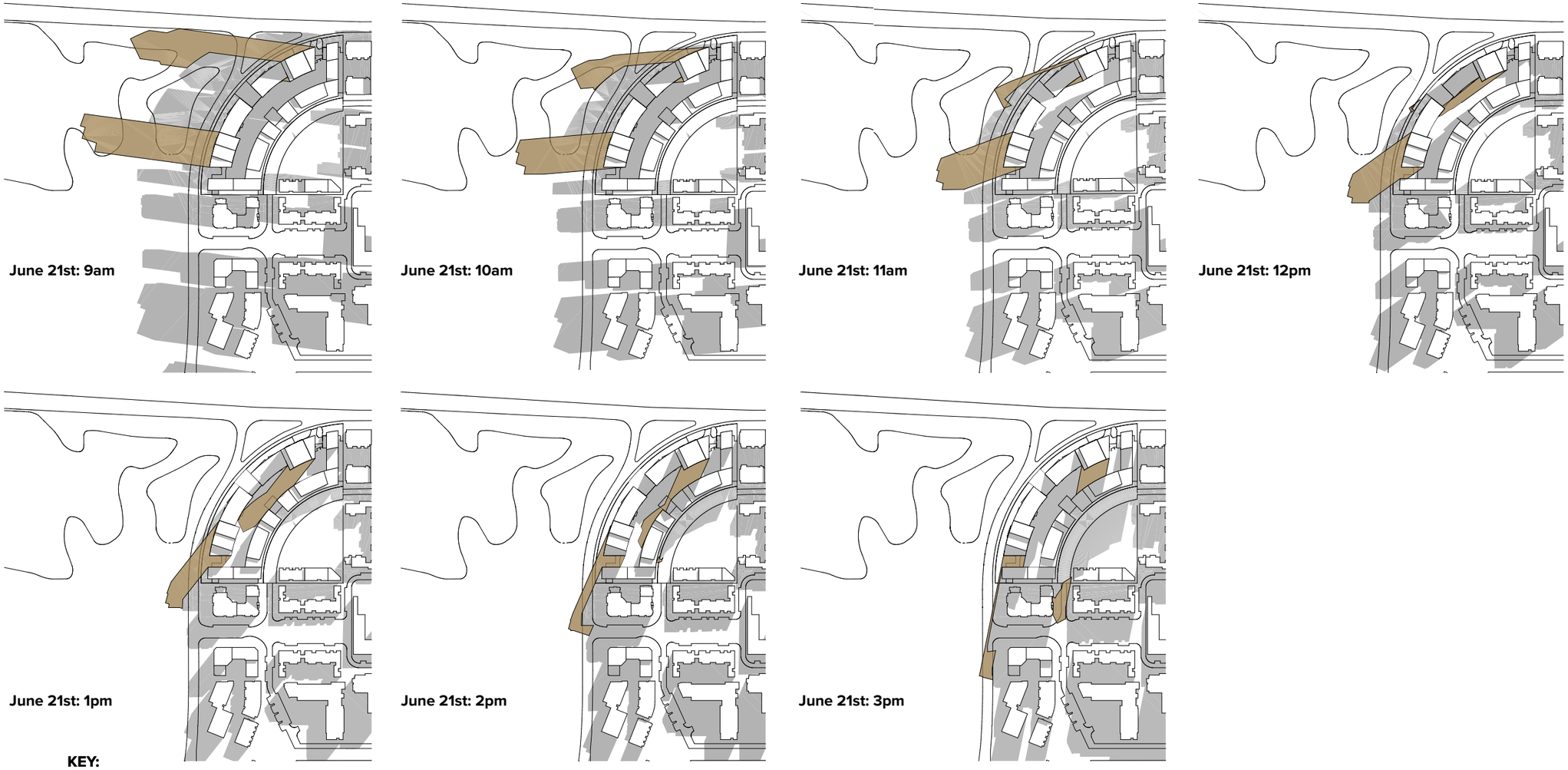
Shadows of Existing approved Concept Envelope and Neighbouring Buildings

2018 PREVIOUS PROPOSED MODIFICATION - 25 / 35 STOREYS

Shadow study: overshadowing of outdoor open spaces

N

SOLAR ACCESS TO OPEN SPACES



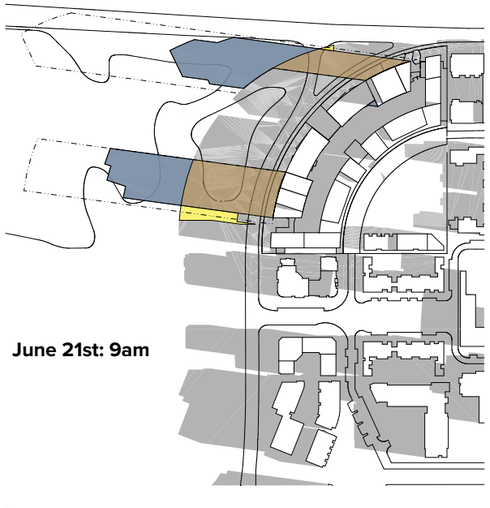
2020 PROPOSED MODIFICATION - 14 / 19 STOREYS

Shadow study: overshadowing of outdoor open spaces

N

15.04.2020
DLCS Quality Endorsed Company ISO 9001:2015, Registration Number 20476
Nominated Architect: Nicholas Turner 6695, ABN 86 064 084 911

SOLAR ACCESS TO OPEN SPACES



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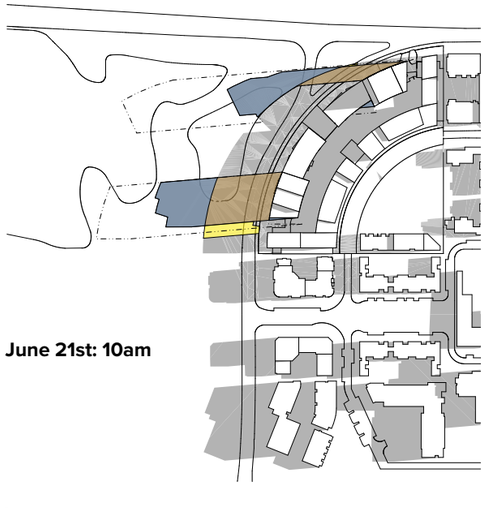

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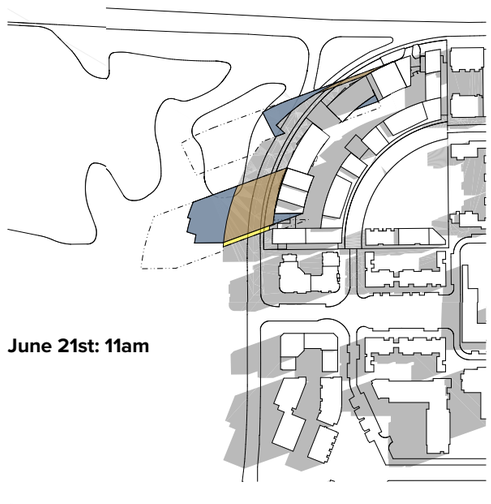

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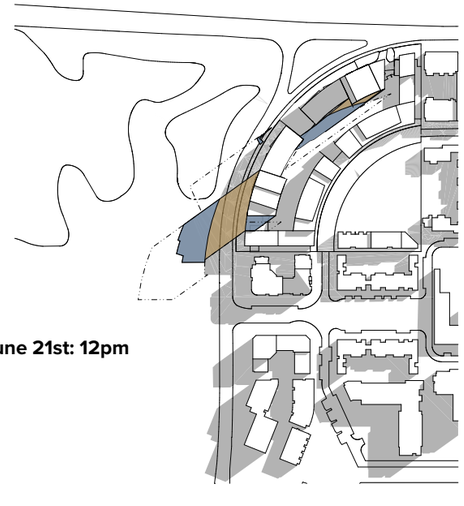

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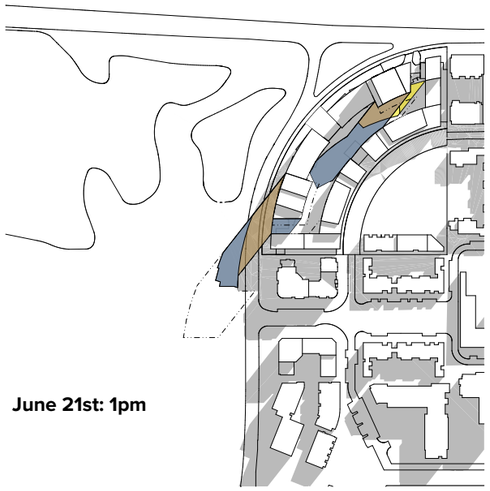


June 21st: 1pm

June 21st: 2pm

June 21st: 3pm

Shadow from remaining unbuilt portion of 2013 approved Concept Envelope (building C and F)

Additional shadow from remaining unbuilt portion of 2020 MOD 4 Proposed Envelope compared to 2013 approved Concept Envelope (building C and F)

Reduction in shadow from remaining unbuilt portion of 2020 MOD 4 Proposed Envelope compared to 2013 approved Concept Envelope (building C and F) (dashed outline indicates gain in solar access to apartments above ground level)

Shadow cast by previous 2018 MOD 4 proposed envelope (building C and F)

Shadow of existing built 2013 Approved Concept Envelope and Neighbouring Buildings

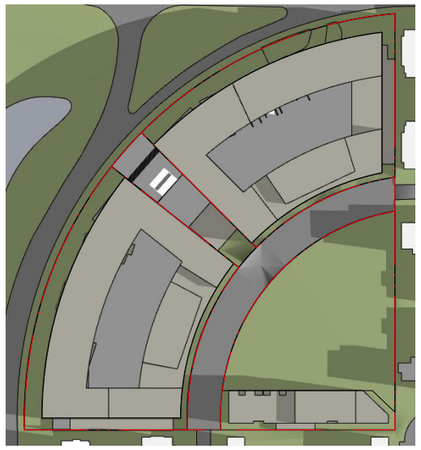
COMPARISON

2020 Proposed Modification: Increase/Decrease in overshadowing of outdoor open spaces

N

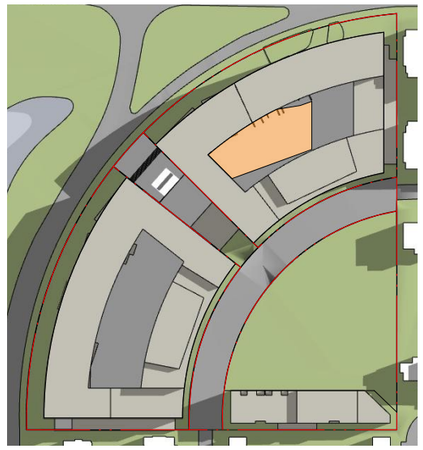
COURTYARD ANALYSIS

2013

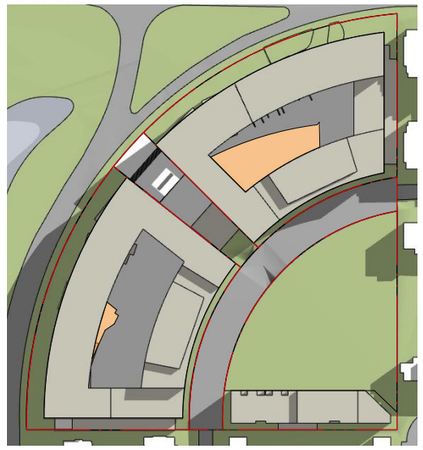


June 21st: 9am
0 sqm
0%

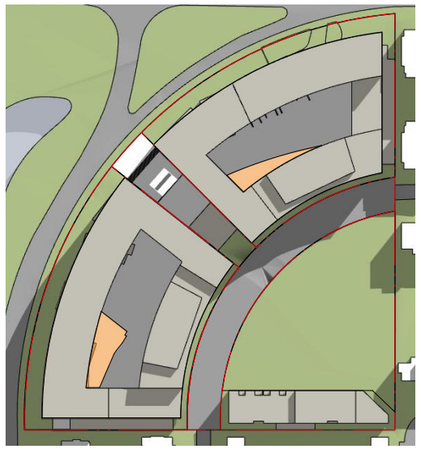
June 21st: 10am
419 sqm
12.6%



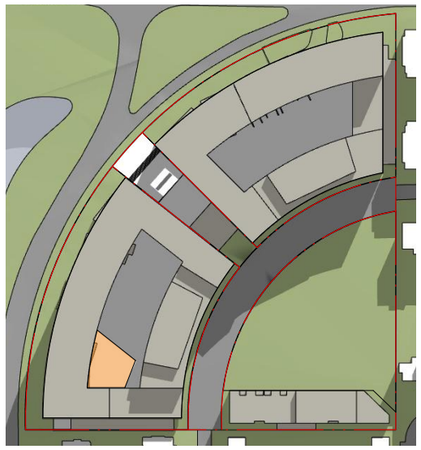
June 21st: 11am
948 sqm
28.5%



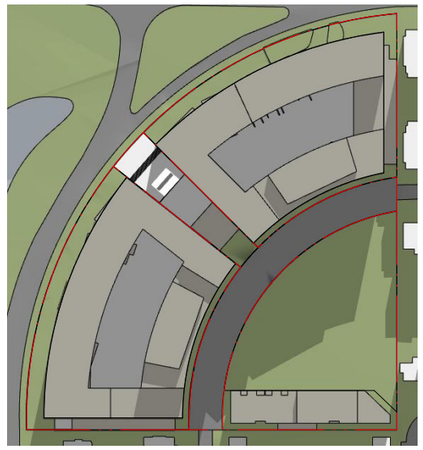
June 21st: 12pm
837 sqm
25.2%



June 21st: 1pm
548 sqm
16.5%



June 21st: 2pm
387 sqm
11.6%



June 21st: 3pm
0 sqm
0%

Courtyard Space
3,324 sqm

Average Solar Access
13.5%

Communal Open Space Courtyard Solar Access

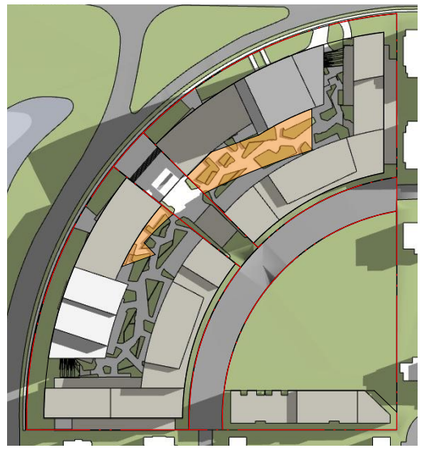
Shadow of existing built 2013 Approved Concept Envelope and Neighbouring Buildings

COURTYARD ANALYSIS

2020

June 21st: 9am
0 sqm
0%

June 21st: 10am
244 sqm
5.9%



June 21st: 11am
1,103 sqm
26.8%

June 21st: 12pm
1,295 sqm
31.5%

June 21st: 1pm
607 sqm
14.7%

June 21st: 2pm
918 sqm
22.3%

June 21st: 3pm
703 sqm
17.1%

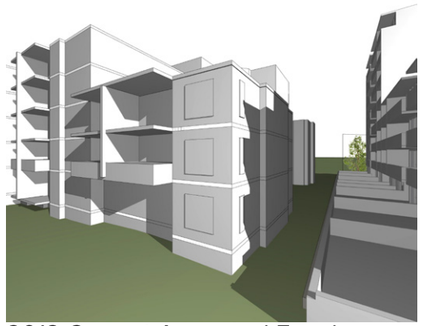
Courtyard Space
4,117 sqm

Average Solar Access
16.9%

Communal Open Space Courtyard Solar Access

Shadow of existing built 2013 Approved Concept Envelope, Proposed Mod 4 2020 BEA and Neighbouring Buildings

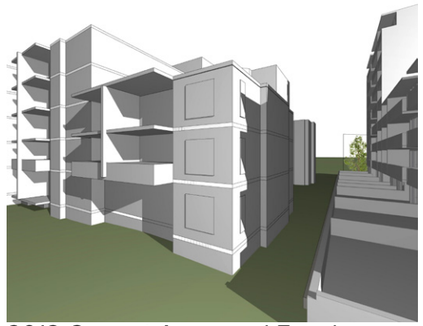
NEIGHBOURING BUILDINGS SHADOW STUDY



2013 Current Approved Envelope

2020 Proposed Envelope

June 21st: 2.30pm



2013 Current Approved Envelope

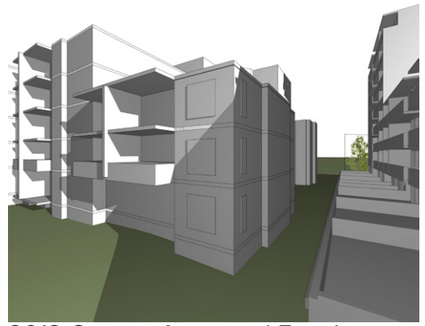
2020 Proposed Envelope

June 21st: 2.40pm

2013 Current Approved Envelope

2020 Proposed Envelope

June 21st: 2.50pm



2013 Current Approved Envelope

2020 Proposed Envelope

June 21st: 3.00pm

Note: Shadow Studies
Existing Windows and Openings shown are approximate only
Ground plane garden and driveway not modelled in detail
(Refer photo for as built condition)

SUMMARY

Criteria		2013 Approved Concept	2018 Previous MOD4	2020 Proposed MOD4
Building Height	Overall Site	8-9 Storeys	25-35 Storeys	14-19 Storeys With articulation to BEA envelopes: C 14-17 stories; F 16-19 stories
Apartment Numbers (Approx.)	Sites C&F only Overall site	99/71/6 = 176 209/405/27 = 641	127/240/36=403 304/578/56 =938	82/118/20 = 220 192/452/41 = 685
Carparking (Approx.)	Overall site	850	1132	552 Existing + 343 New = 895
Communal Open Space (Approx.)*	Site Area = 25,570sqm (25% = 6,392.5sqm)	12,864 sqm 50.3% of Site Area	12,711 sqm 49.7% of Site Area	13,657 sqm 53.4% of Site Area
Direct Solar Access to Public and Communal Open Space (Average mid winter 9am – 3 pm, BEA)	**Courtyard**	Average 448 / 3,324 sqm 13.5%	3,331 sqm 7.9%	Average 695 / 4,117 sqm 16.9%
	Bay Park 4,868 sqm	78%	78%	78%
	Overall Site (Courtyard, Through site link, Bay Park, Side, Front & Back Setbacks)	45%	43%	45%
	Wetlands	97.1%	89.8%	95%
Direct Solar Access to Private Dwellings (min 2 hour solar access to Apartment Buildings mid winter 9am – 3 pm)**	Within Site: Buildings A,B,D,E,G,H,J Buildings C, F Total	 345 / 465 123 / 176 468 / 641 (73.0%)	 Min 70%	 340 / 465# 158 / 220 498 / 685 (72.7%)
	Neighbouring Apartment Buildings	No impact on neighbouring buildings, from remaining unbuilt portion of BEA (buildings C and F)	Additional Shadow Any apartments affected retain minimum 2hrs solar access.	Negligible impact on neighbouring buildings, from remaining unbuilt portion of BEA (buildings C and F).

* Based on Building Envelope Area (BEA), including 6060 sqm Public Park and Through Site Link, excluding Rooftop Communal Gardens

Any existing apartments impacted by the 2020 proposed BEA that currently achieve min 2 hours solar access, will retain minimum 15mins (and up to 60 mins) solar access between 9am and 3pm in mid-winter.

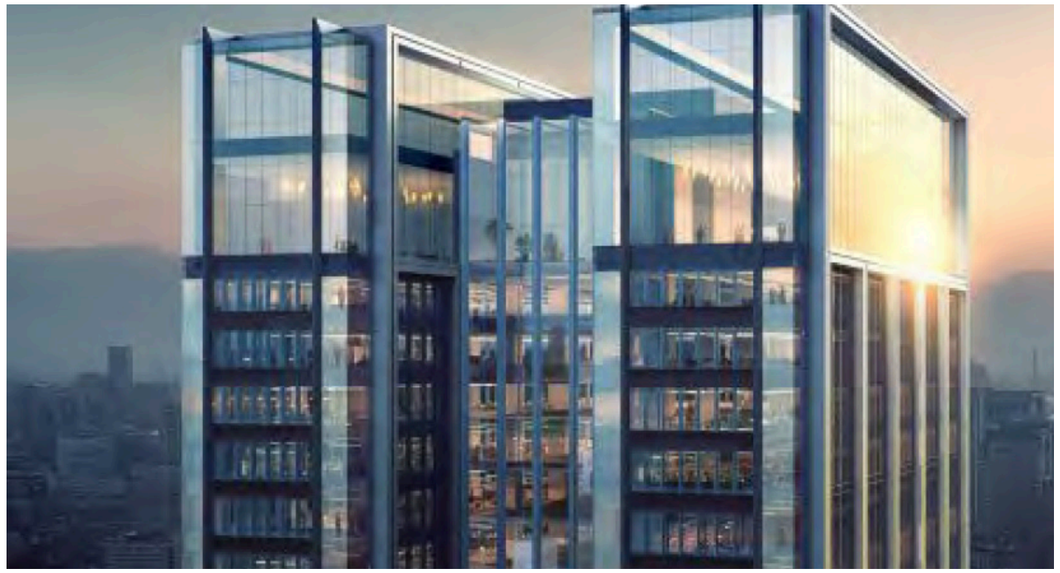
**Note: Calculations for “no direct sunlight” are not provided for existing apartments (as the DAs were approved prior to ADG). However, Turner completed solar access studies of existing apartments that are impacted by either the 2013 Approved or 2020 Proposed Building Envelopes. Of these apartments studied, 28 apartments receive no direct sunlight under the Current Approved Envelope and 23 apartments receive no direct sunlight under the Proposed Envelope.

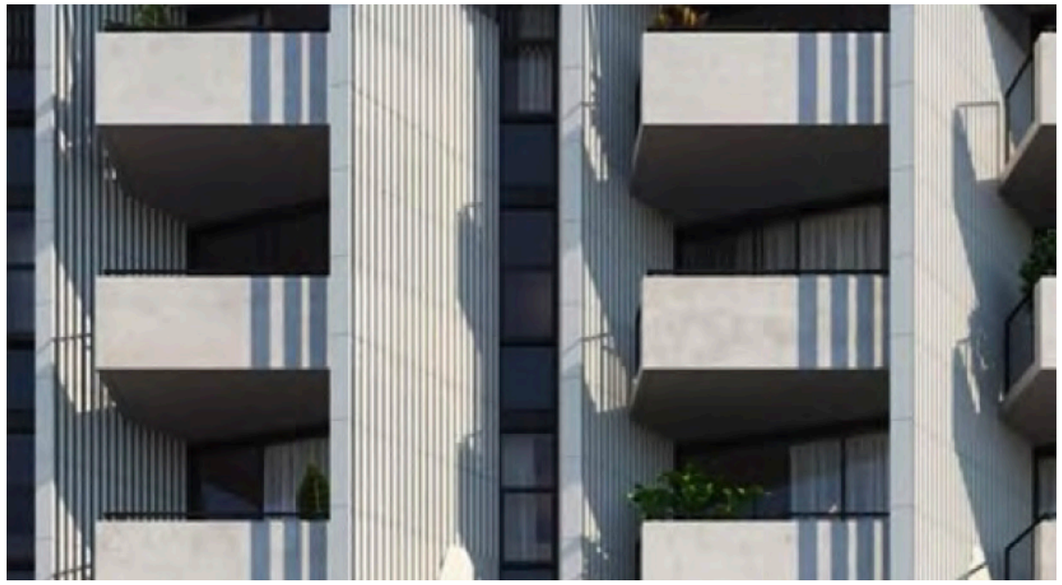
04. DESIGN EXCELLENCE

SUSTAINABLE INITIATIVES

INSPIRATION

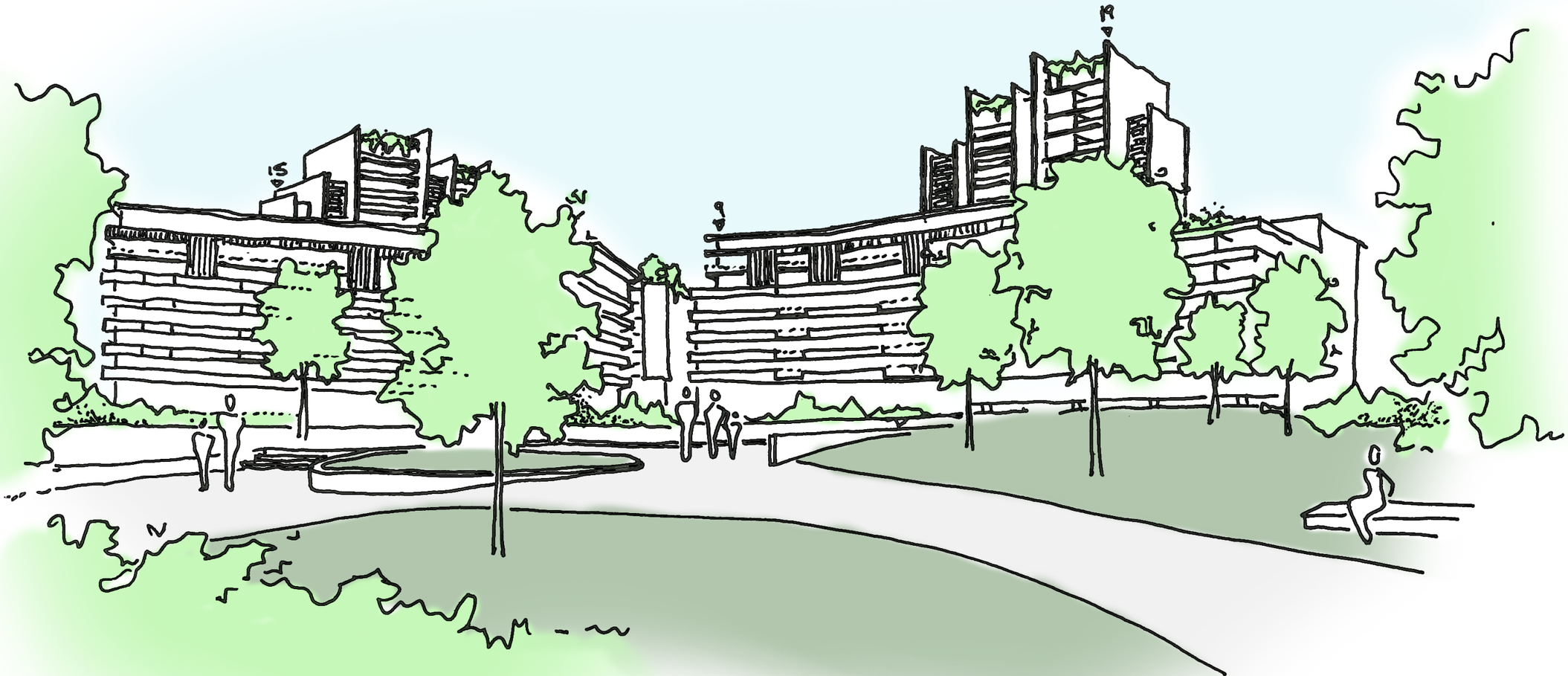
Possible precedents drawn from the Urban and Natural context





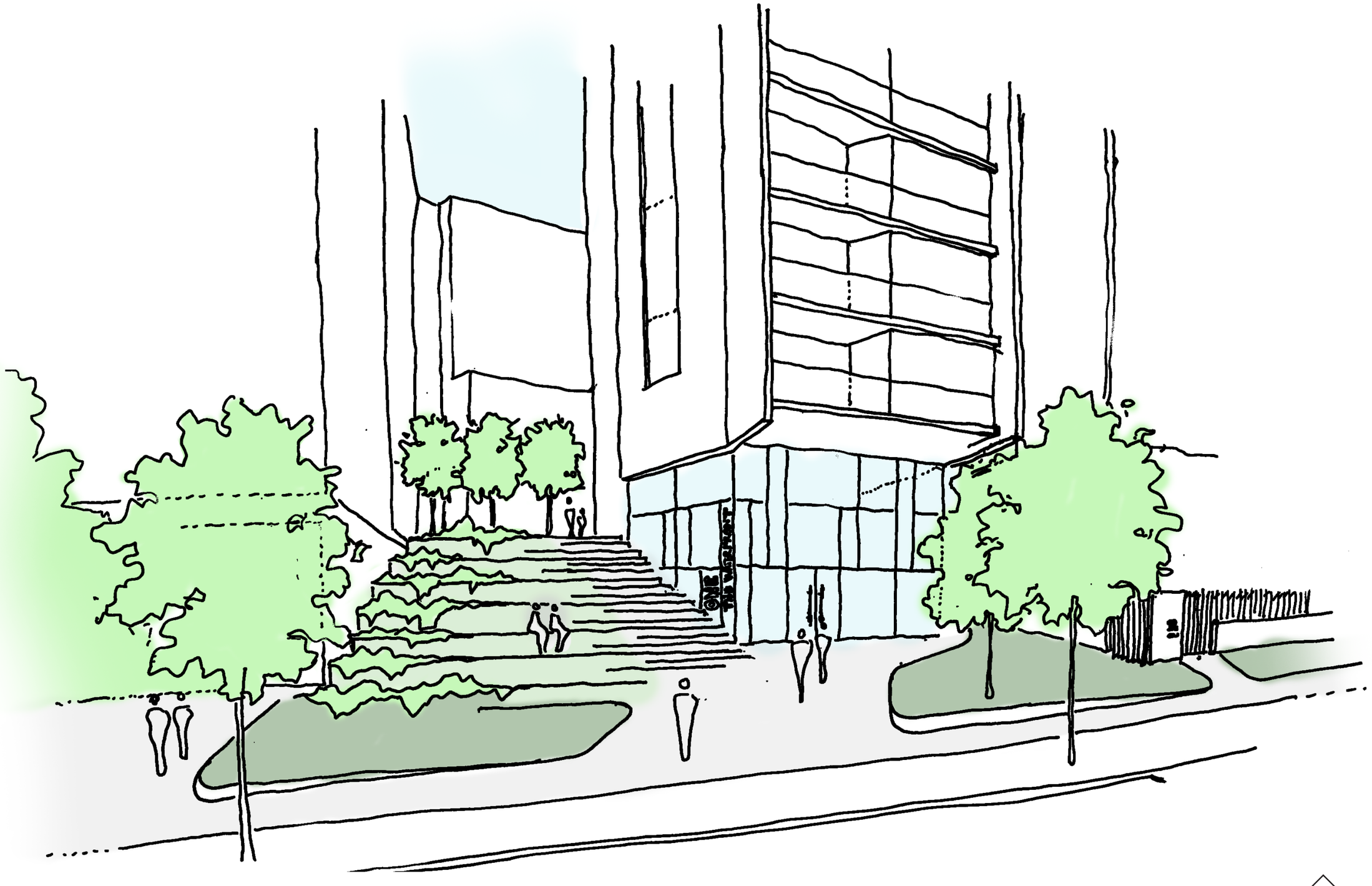
BUILDINGS WITHIN LANDSCAPE

VIEW FROM NORTH AT BAY PARK



LANDSCAPE WITHIN BUILDINGS

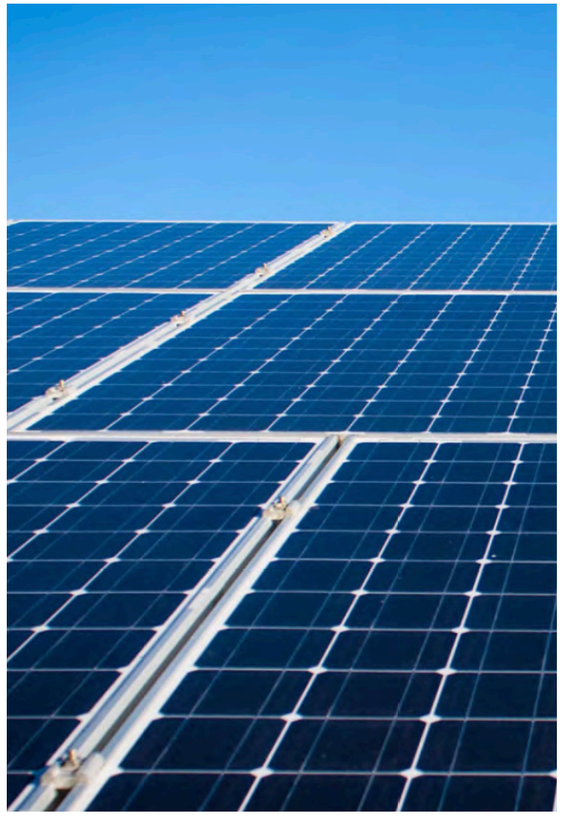
VIEW OF BUILDING F LOBBY & IMPROVED PUBLIC DOMAIN



INNOVATION & SUSTAINABILITY

RAINWATER HARVESTING

COMMUNITY GARDENS



SOLAR PANELS

PASSIVE SOLAR SHADING

Potential Initiatives include:

Rainwater Harvesting / Communal Gardens and landscape design for increased biodiversity / Passive Solar Shading / Common rooms/Energy monitoring /

Electrical vehicle charging facilities /Energy saving lighting and power / WELs rated hydraulic fixtures, landscaped roof terraces

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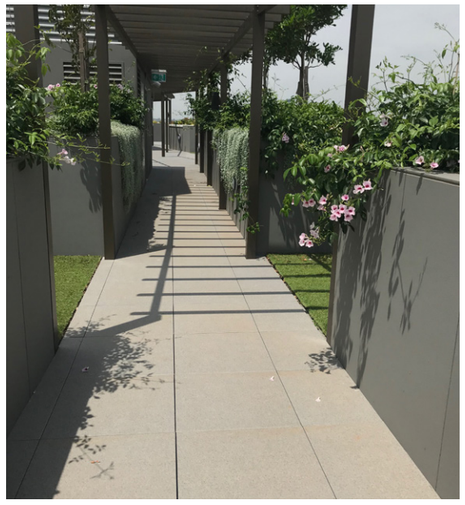
Nominated Architect: Nicholas Turner 6695, ABN 86 064 084 911

CLUB ONE

COMING SOON TO THE COMMUNITY



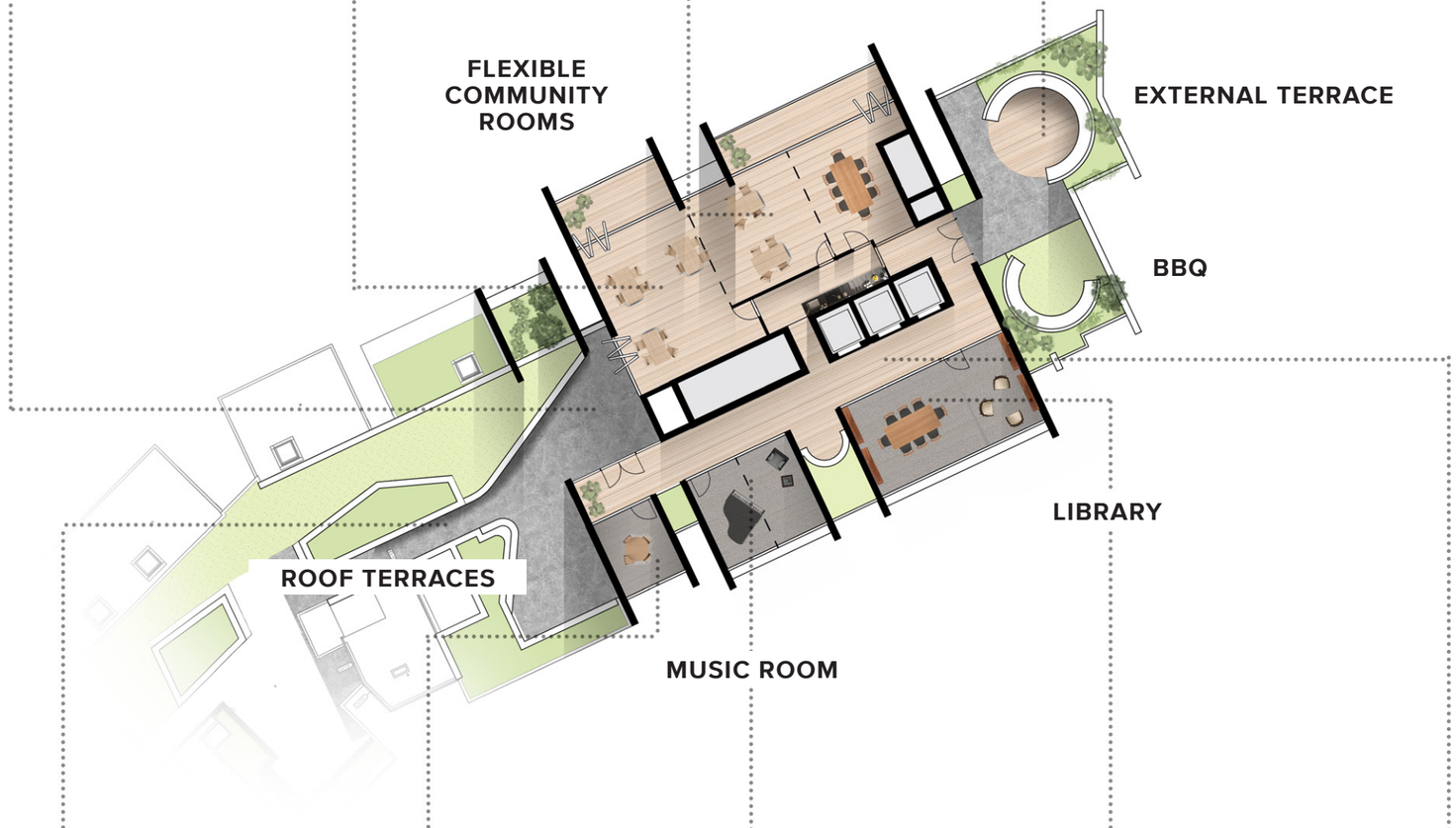
The Club One facility is located at ground floor of building A.

15.04.2020
DLCS Quality Endorsed Company ISO 9001:2015, Registration Number 20476
Nominated Architect: Nicholas Turner 6695, ABN 86 064 084 911

POTENTIAL

SKY CLUB

BUILDING F LEVEL 9



15.04.2020
DLCS Quality Endorsed Company ISO 9001:2015, Registration Number 20476
Nominated Architect: Nicholas Turner 6695, ABN 86 064 084 911

SITE PERSPECTIVES

Building F at the junction of Hill Road and Bennelong Parkway

SITE PERSPECTIVES

SITE PERSPECTIVES

Building C at Bennelong Parkway

SITE PERSPECTIVES

CONCLUSION

This submission allows for a design outcome that improves upon the existing concept envelopes including better ADG compliance, site permeability, communal facilities, and potential sustainability initiatives. The submission is a merits driven approach that genuinely seeks to go further than 'business as usual' by providing better amenity for all residents within the development. The design is respectful of it's adjoining context, and can facilitate an improved urban design outcome. The submission has responded to the previous local and state authority feedback and the proposal has been substantially amended from the previous S75w design to resolve these items. These last two remaining buildings are the final piece of the jig-saw within this prominent site and precinct, and provide for the opportunity to achieve a greater outcome for all.

15.04.2020

TURNER piety group

ONE THE WATERFRONT

URBAN DESIGN REPORT

23 Bennelong Parkway
Wentworth Point NSW 2127

S75W MOD 4 (2020)

By: TURNER
For: PIETY THP
Project Ref. No: 18039
Nominated Architect: Nicholas Turner 6695