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Version

2.0

184B - 190 Kurraba Road
Kurraba Point

Council RFI 01 Submission
August 2023

Koichi Takada Architects

koichitakada.com

Koichi Takada Architects

PB&Co.

Project Team

Access	Morris Goding Access Consulting
Acoustic Engineer	Acoustic Logic
Arborist	Jacksons Nature Works
Architect	Koichi Takada Architects
Building Surveyor (BCA)	Building Certi□cates Australia
Civil	Van der Meer Consulting
Climate Adaptation Plan	LID Consulting
Developer	PB & Co.
Electrical	Greenview Consulting
ESD (BASIX)	Greenview Consulting
Geotechnical	Douglas Partners
Heritage Consultant	Urbis
Hydraulics	Greenview Consulting Pty Ltd
Landscape Architect	Dangar Barin Smith
Land Surveyor	LTS Lockley
Life Cycle Assessment	Etool | Edge Environment
Mechanical	Greenview Consulting Pty Ltd
Planner	Gyde
Survey & Title	LTS
Tra□c Engineer	Stantec
Visual Sharing	Urbis
Waste	Elephant's Foot Consulting

Kurraba Point

This proposal is for a highly sustainable and innovative luxury residential development on a once-in-a-generation site on the Sydney Harbour, designed by Koichi Takada Architects for PB & Co. This exclusive waterfront site is uniquely located in Kurraba Point, a natural peninsula in North Sydney bounded by the Sydney Harbour, Neutral Harbour and Shell Cove.

Koichi Takada Architects have designed a one-of-a-kind development with the highest sustainable outcomes. The overall vision is for a transformative project which embodies the idea of 'regenerative luxury,' inspiring a zero-carbon lifestyle for it's residents. This project will lead the way in the luxury housing market and support the New South Wales state government objective to achieve carbon neutrality by 2050.

The design features four sculptural, low-rise buildings which are contextually appropriate and respond to the local character of the area but also look towards future ways of living. The two structures on Kurraba Road house six residences and the two waterfront structures house four residences. Site planning and form responds to the steep grade of the site by embedding the structures deep into the landscape to maximise harbour views from all vantage points on site.

The project is designed to be carbon neutral in both design and operations. The building form makes use of passive design strategies and technology to respond to the unique environmental conditions on the harbour. All energy needed to power the buildings will be generated on-site through rooftop solar farms and an underground geothermal energy system which provides heat and generates electricity. Rainwater will be collected for irrigation of planted areas and building management systems will control, monitor and maximise building performance. Integrated shading structures control solar access while maintaining views and privacy. Local, sustainable materials will undergo a full life cycle assessment and there will be adequate charging provisions for electric vehicles and bicycles, extending the sustainability bene□ts of the project far beyond the bounds of the site.

Above: View from Kurraba Road.

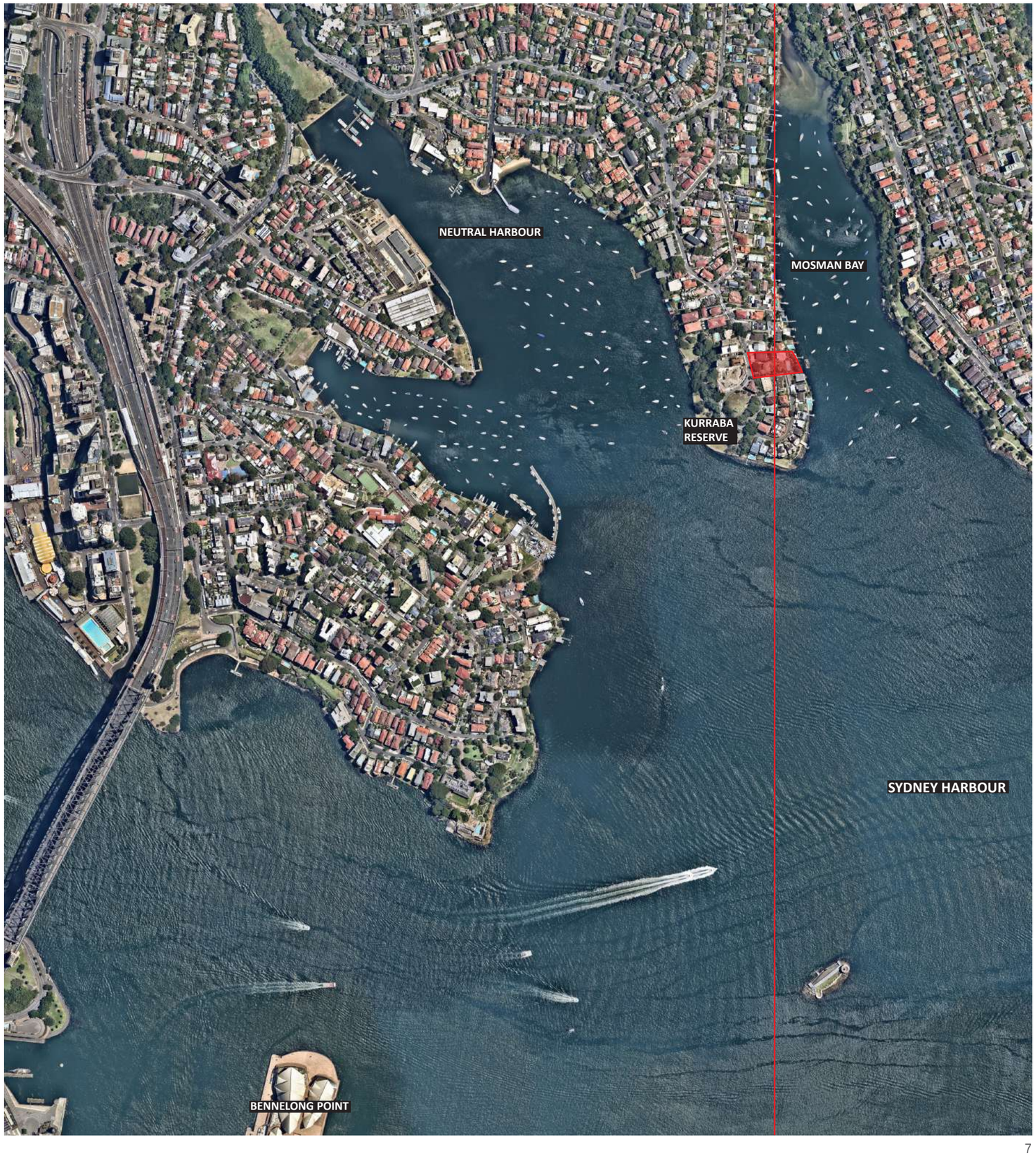
Site Context & Analysis

2.0

2.1 Context Plan
Kurraba Point

Kurraba Point is ideally positioned on the Sydney Harbour, four kilometres north of the Sydney central business district in the North Sydney local government area. The neighbourhood is characterised by low and medium-rise brick residential buildings and an existing network of green spaces including the Kurraba Reserve and Hodgsons Lookout Park.

Cycleways, walking paths and neighbourhood roads connect the site to the adjacent communities of Cremorne Point and Neutral Bay. The site is connected to Sydney's public transit system via ferry from the Kurraba Point Wharf which is a short walk away. There is direct harbour access from the site.



2.2 Location Plan
Kurraba Point

The site is a trapezoidal parcel of land measuring 3343m2. The site itself is zoned for low-density (R2) and high-density (R4) development, with surrounding sites low-high density residential. There are three existing two/three storey structures on site to be demolished. The surrounding neighbourhood has a leafy and tranquil character.

Site Area: 3343 m2

R2 Low Density Residential: 1936m2

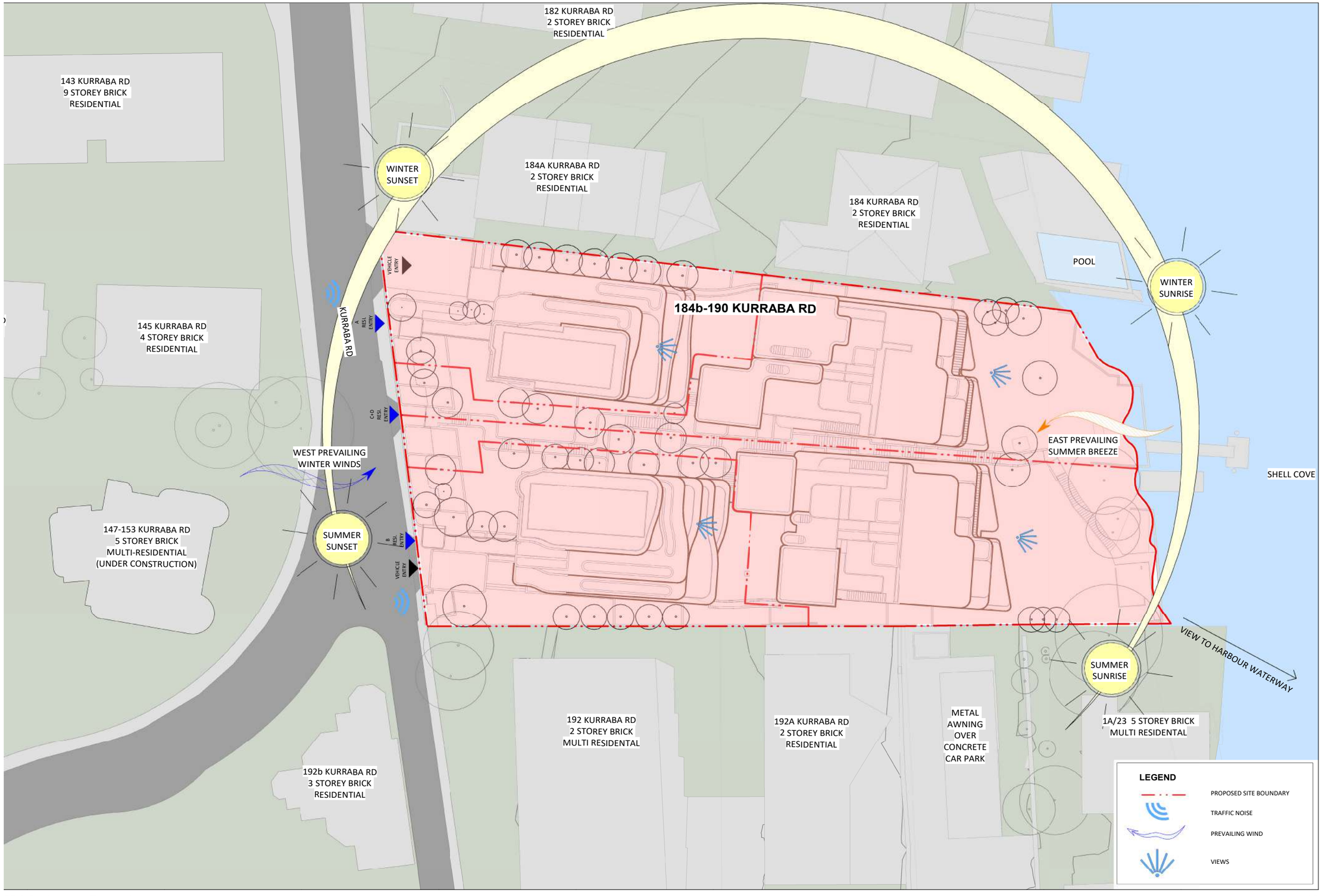
R4 High Density Residential: 1407m2

Street Address: 184b-190 Kurraba Road, Kurraba Point NSW 2089

Street Frontage: Kurraba Road

Existing Structures: 2-3 storey dwellings

Environmental Analysis

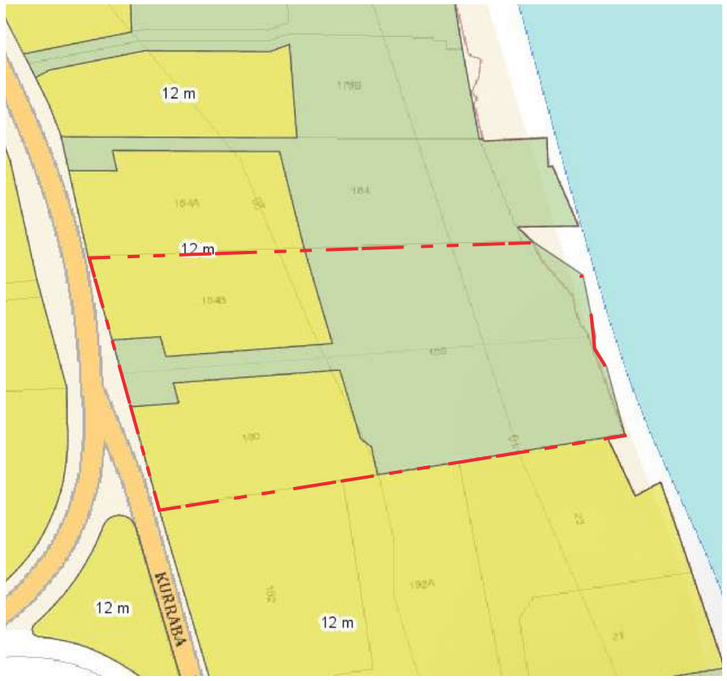


Planning Controls

Land Use (Zoning)

NTS

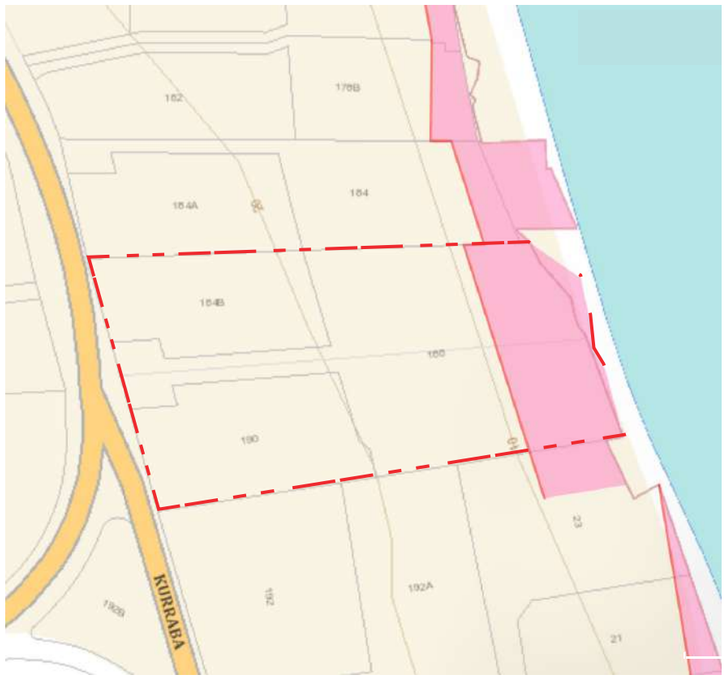
- R4 High Density Residential
- R2 Low Density Residential



Building Height Controls

NTS

- 12m Height Limit
- 8.5m Height Limit



Foreshore Building Line

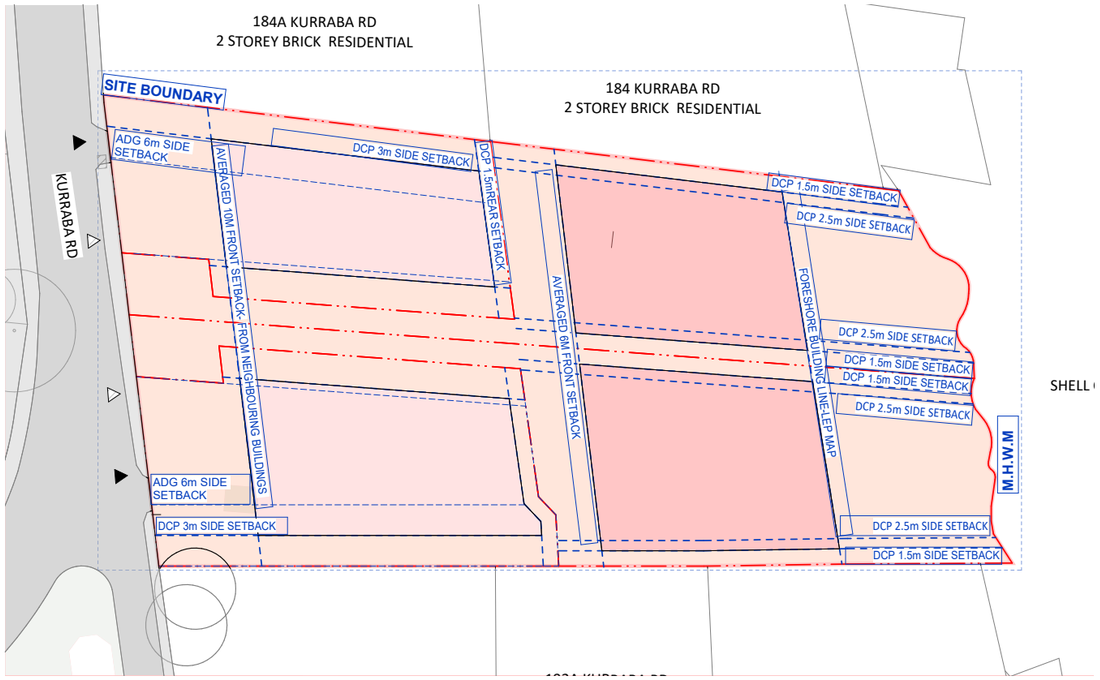
NTS

- Foreshore Area
- Foreshore Building Line

Topography

Scale 1.600

The site has a considerable level change with a heavily stepped cross-fall of approximately 26m from east to west towards Shell Cove.



Setbacks - Existing Boundary

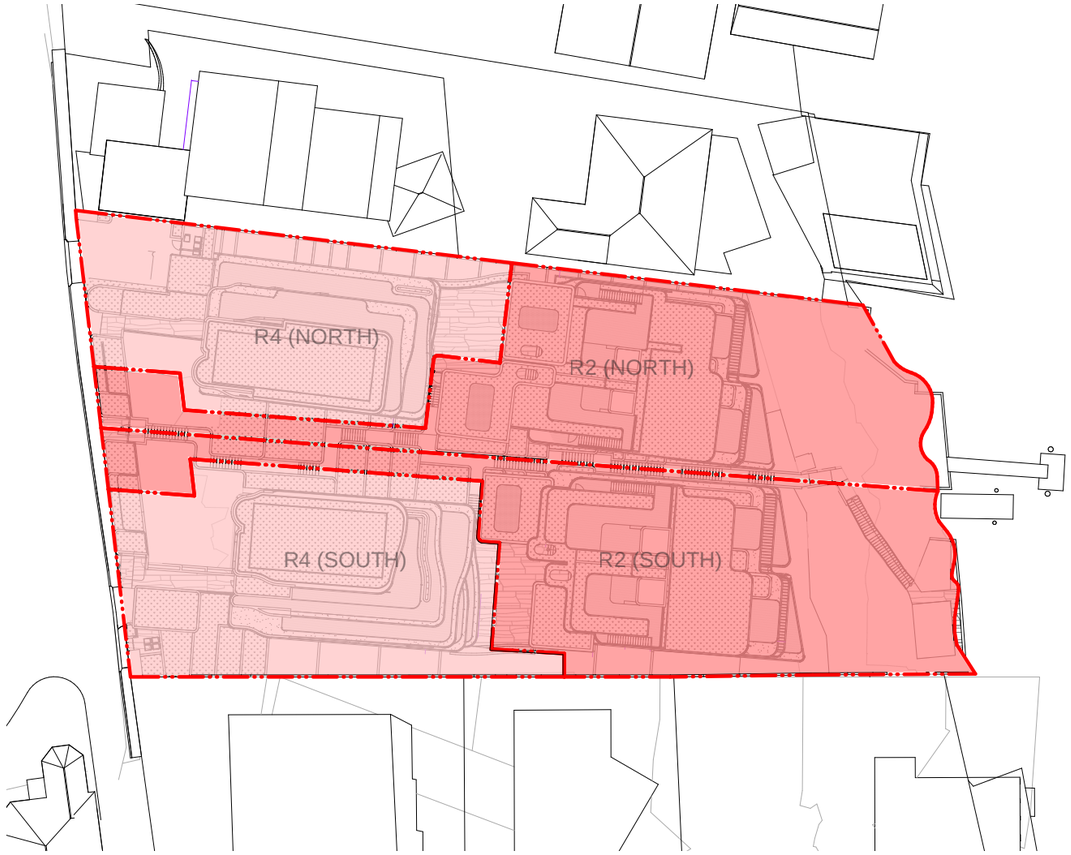
Scale 1.600

- Buildable Area at R4 Zone
- Buildable Area at R2 Zone

Masterplan Framework

3.0

Land Use | Setbacks

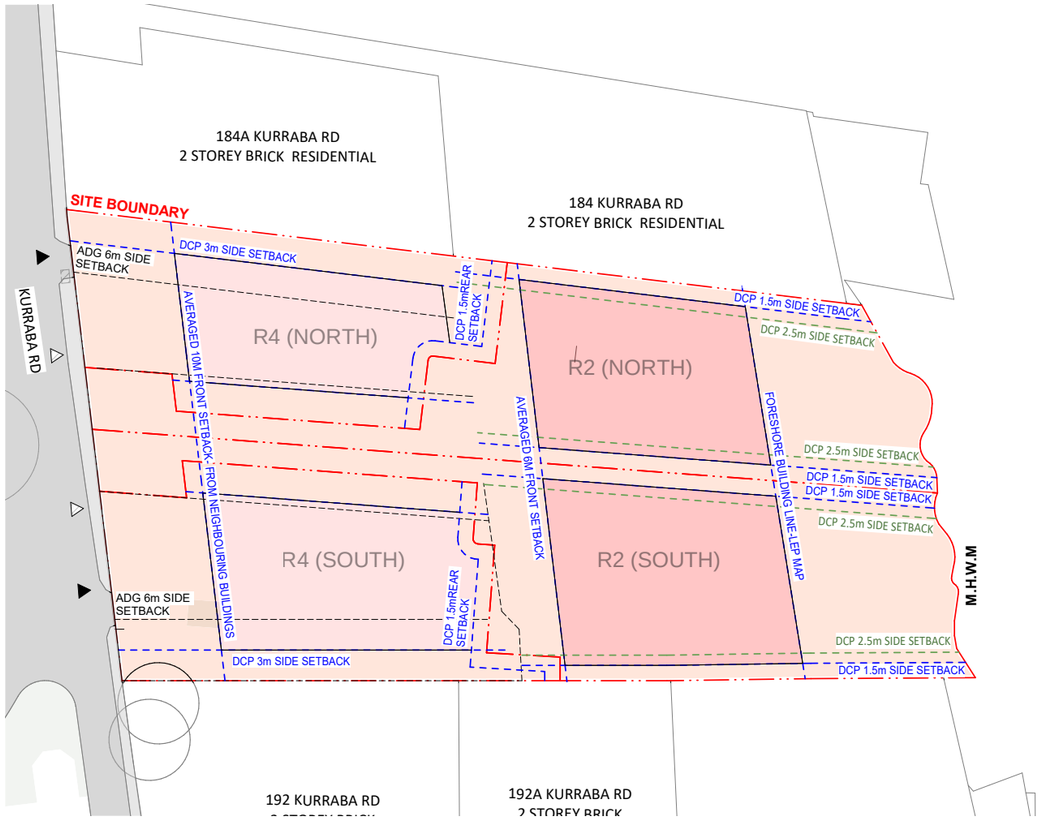


Land Use (Zoning)

Scale 1.600

R4 High Density Residential - multi dwelling housing, residential flat buildings
- R4 (North) Site Area: 658m2
- R4 (South) Site Area: 749.4m2

R2 Low Density Residential - dual occupancies, semi-detached dwellings
- R2 (North) Site Area: 923.6m2
- R2 (South) Site Area: 1012.3m2

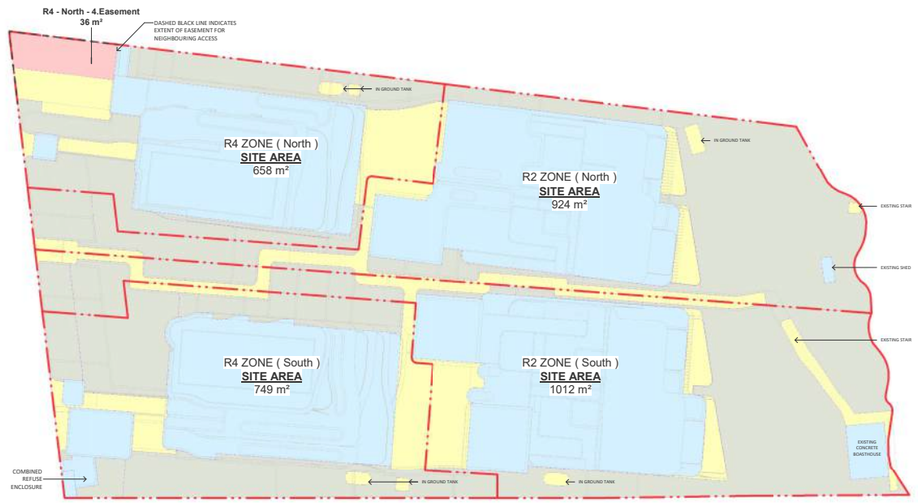


Setbacks - Proposed Boundary

Scale 1.600

- Buildable Area at R4 Zone
- Buildable Area at R2 Zone

Site Coverage, landscape and unbuilt upon area



Total Site Scale 1.600

Site Coverage: 1487m2 (44.9%)

Landscape: 1371m2 (41.5%)

Unbuilt Upon Area: 449m2 (13.6%)

Excavated Area | Deep Soil

Excavated Area

Scale 1.600

Excavated Area

Zone R2: 76m2 (3.9%)

Zone R4: 734.9m2 (53.6%)

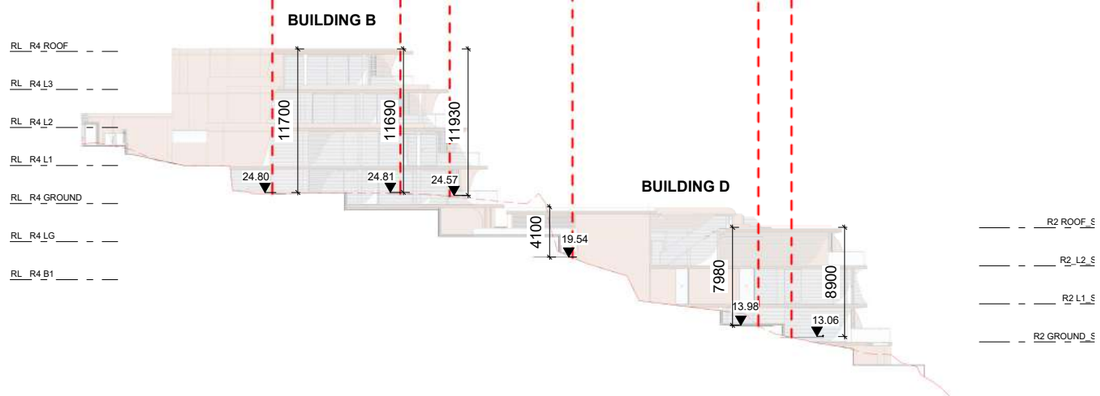
Deep Soil

Scale 1.600

R4 North Deep Soil: 195m2 (31.4%)
R4 South Deep Soil: 290m2 (38.7%)
Total R4 Deep Soil: 485m2 (35.4%)

R2 North Deep Soil: 415m2 (44.9%)
R2 South Deep Soil: 436m2 (43.1%)
Total R2 Deep Soil: 851m2 (44%)

Building Height

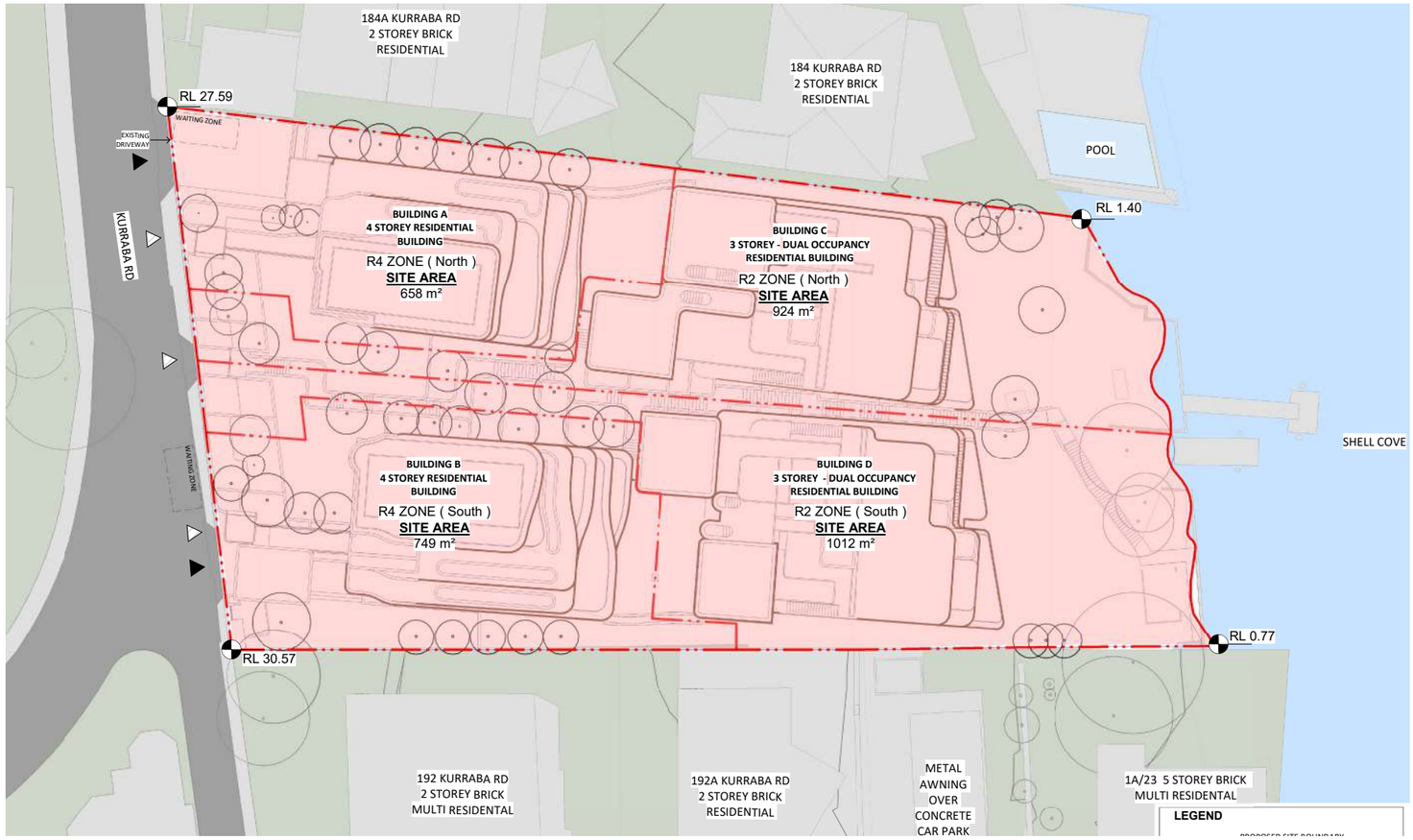


Public View Corridor

The massing strategy incorporates a public view corridor which runs from east to west across the site and is open to the sky. The break in the massing creates articulation along the street wall, maintaining neighbourhood views between Kurraba Road and Mosman Bay.

Site Controls and Compliance

The massing responds to existing site controls and ensures a high level of residential amenity is achieved. The development has been designed with careful consideration of the objectives in the relevant DCP and LEP. This development is not required to meet the design standards set out in the Apartment Design Guide (ADG).



Site Plan: 1.500

R4 Zone

Local Environmental Plan (LEP) Controls

- ✓ Height Control: 12m max. building height
- ✓ Use: Residential Flat Building

Development Control Plan (DCP) Controls

- ✓ Front setback control - alignment to neighbours
- ✓ Side setback control 3m. Must not exceed height plane at 3.5m above boundary at 45 degrees.
- ✓ Rear setback control min. 1.5m. Must not exceed height plane 3.5m from boundary at 45 degrees.
- ✓ Flat roof 36 degree setback.
- ✓ Site coverage: max. 45% of site area
- ✓ Landscaped area: min. 40% of site area
- ✓ Unbuilt upon area: min. 15% of site area

R2 Zone

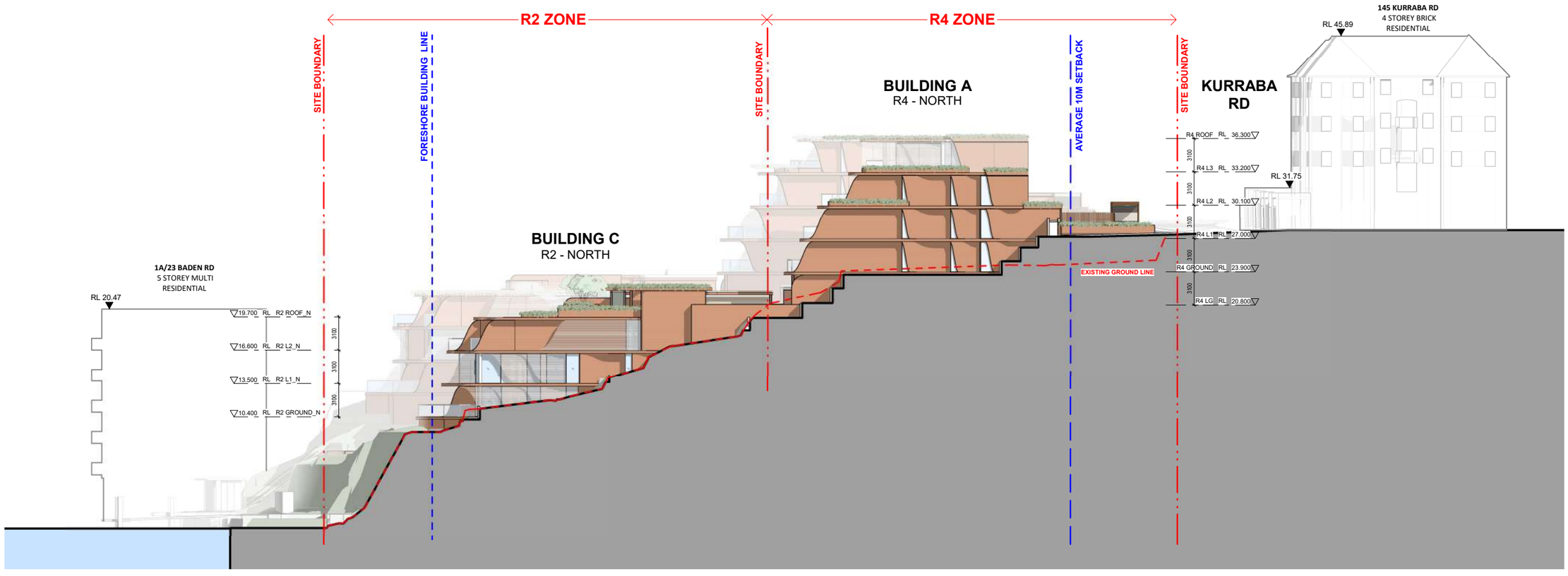
Local Environmental Plan (LEP) Controls

- ✓ Height Control: 8.5m max. building height
- ✓ Use: Detached dwelling house dual occupancy
- ✓ Foreshore building setback
- ✓ Min. lot size 450m2

Development Control Plan (DCP) Controls

- ✓ Front setback control - alignment to neighbours
- ✓ Side setback control - 900mm up to 4m, 1.5m up to 7m, 2.5m for 7m+
- ✓ Site coverage: max. 45% of site area
- ✓ Landscaped area: min. 40% of site area
- ✓ Unbuilt upon area: min. 15% of site area

**184B - 190 KURRABA ROAD,
KURRABA POINT NSW 2089**



Design Response

4.0

The proposal sets out to create a landmark luxury residential development at Kurraba Point, ensuring a high quality development appropriate to site and locality. The principal design approach was to create an intrinsic relationship between architecture and nature, maintaining views and privacy for each resident across the steep grade of the site. The buildings incorporate large-scale passive design strategies at a fundamental level well beyond that of a typical commercial development.

The design for Kurraba Point will set a new benchmark in sustainable luxury residential, prioritising landscaping, solar control, natural ventilation and harvesting of renewable energies. Kurraba Point's ambition is to become one of Sydney's greenest residential buildings, targeting a 6-star Green Star rating (equivalent to LEED Platinum).

This development aims to create a new benchmark for multi-residential construction in Sydney. A focus on design-led, ecologically sustainable development and innovative, green technologies will make this project a model for future development. Through these measures, the development aims to inspire a 'zero carbon mindset' in it's residents, promoting a healthy and sustainable lifestyle.

Right: View from Shell Cove.

4.2 Project Summary
Kurraba Point

184B - 190 Kurraba Road, Kurraba Point NSW 2089

Land Use: R4 High Density Residential
R2 Medium Density Residential

Site Area: R4 - 1407m2
R2 - 1936m2
Total (R4 + R2) 3343m2

Building Height (m): 9.8m (Building A), 11.7m (Building B), 7.7m (Building C), 8.9m (Building D).

Gross Floor Area:
R4 Zone (Building A and B): 1288.9m2

R2 Zone (Building C and D): 1055.6m2

Floor Space Ratio (FSR):
R4 Zone: No LEP control
R2 Zone: No LEP control

Unit Mix

Total number of Units: 10 residences

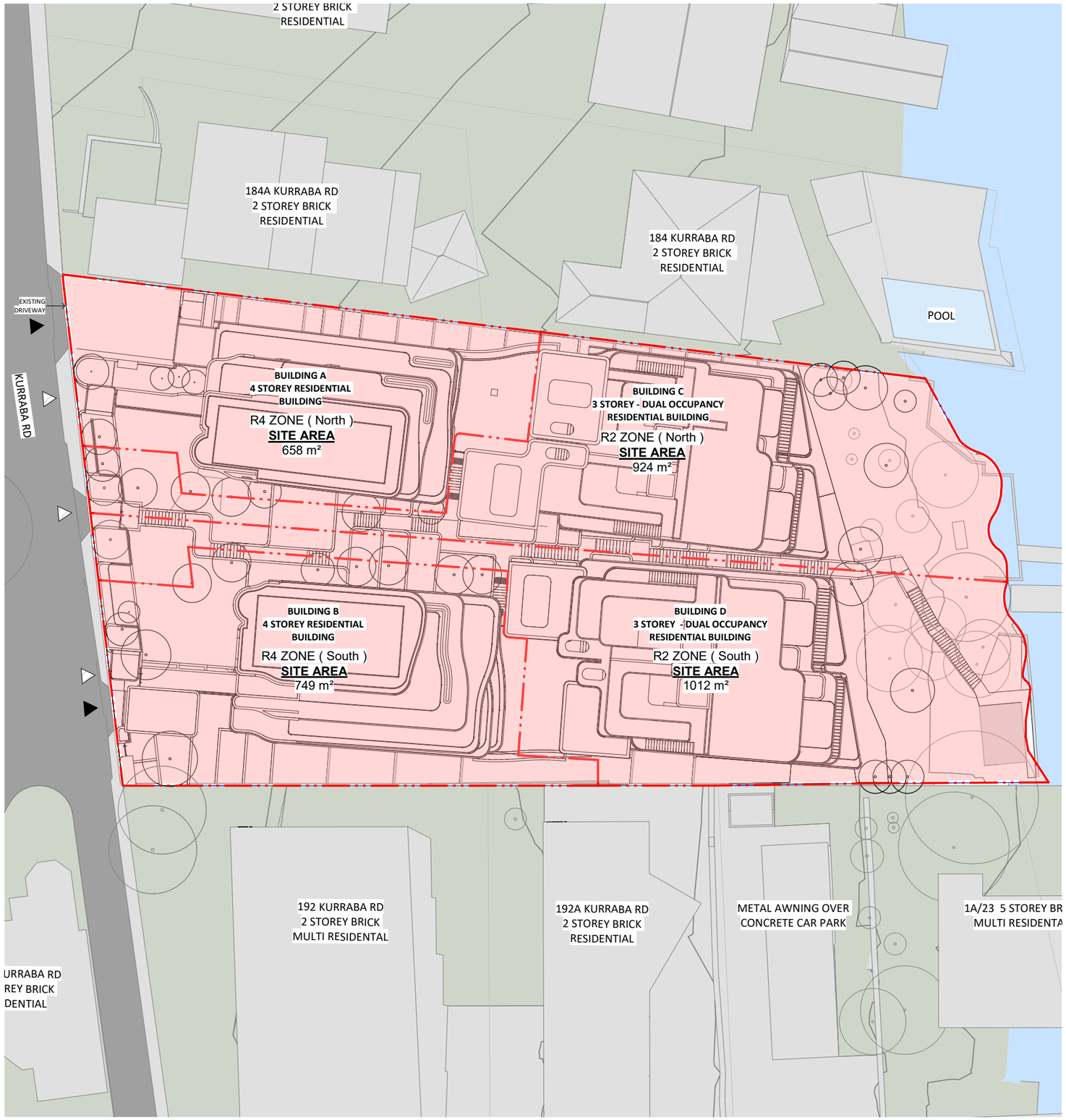
R4 Zone: 6 residences (1x2 bed, 4x 3 bed and 1x 4 bed units)
R2 Zone: 4 residences (4x 3 bed dual occupancy units)

Car Parking

Total Car Parking: 19 spaces

R4 Zone: 9 res. spaces, 2 visitor spaces

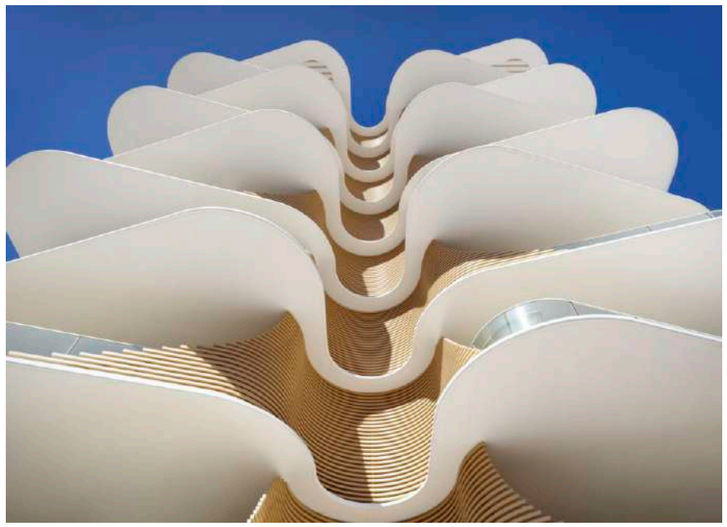
R2 Zone: 8 resident spaces



Sculpted Form

Drawing inspiration from the natural features of the site, Kurraba Point is a sculptural and sympathetic addition to this harbourside neighbourhood. Timber screens and sculptural masonry heighten the natural softness of the form, providing a unique architectural identity to each individual residence.

Floating balcony slabs are strategically overlapped to provide both sun and shade to outdoor spaces below, and timber screening is positioned for privacy and protection from the elements. These overhangs reduce excessive heat and solar gain during warmer months, creating indoor-outdoor spaces that are comfortable year-round. Feature slab edges project past the curving glazed balustrades, re□ecting ambient natural light deep into interior spaces.



Framed Views

Each residence frames the most striking feature of the site over multiple levels: panoramic views of Shell Cove and Cremorne Point. Passive design principles are fully utilized to achieve enhanced comfort while maintaining views.

To fully experience the site's glorious changing light throughout the hours, days and seasons, large □oor-to-ceiling sliding doors, skylights and oversized cantilevered balconies are used to connect residents with their surroundings, outlook and nature.

A view corridor running east to west provides public visual access from Kurraba Road to Shell Cove. This break in massing creates articulation along the street frontage and provides private residential access to the lower levels.

Privacy & Shading

Curvilinear, horizontal timber battens and overhead screening is a central element of the design, accentuating the organic expression of this sculptural building.

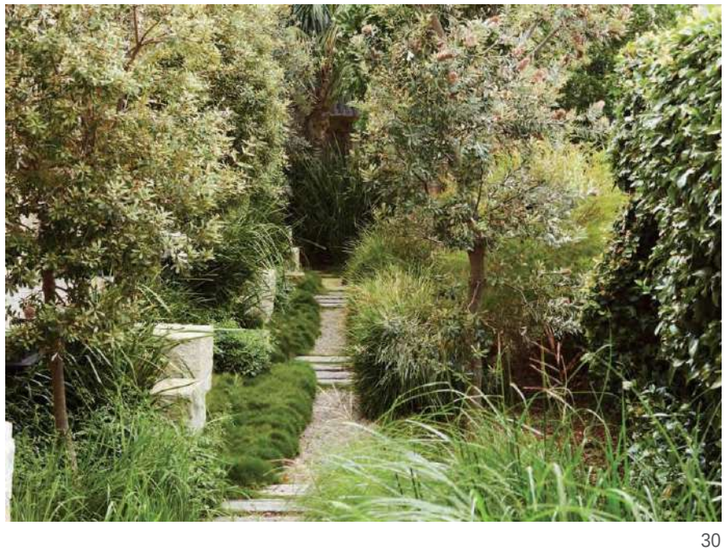
These sun-shading devices control solar access during warmer months, while simultaneously playing into the unique material qualities of the site and allowing uninterrupted water views.

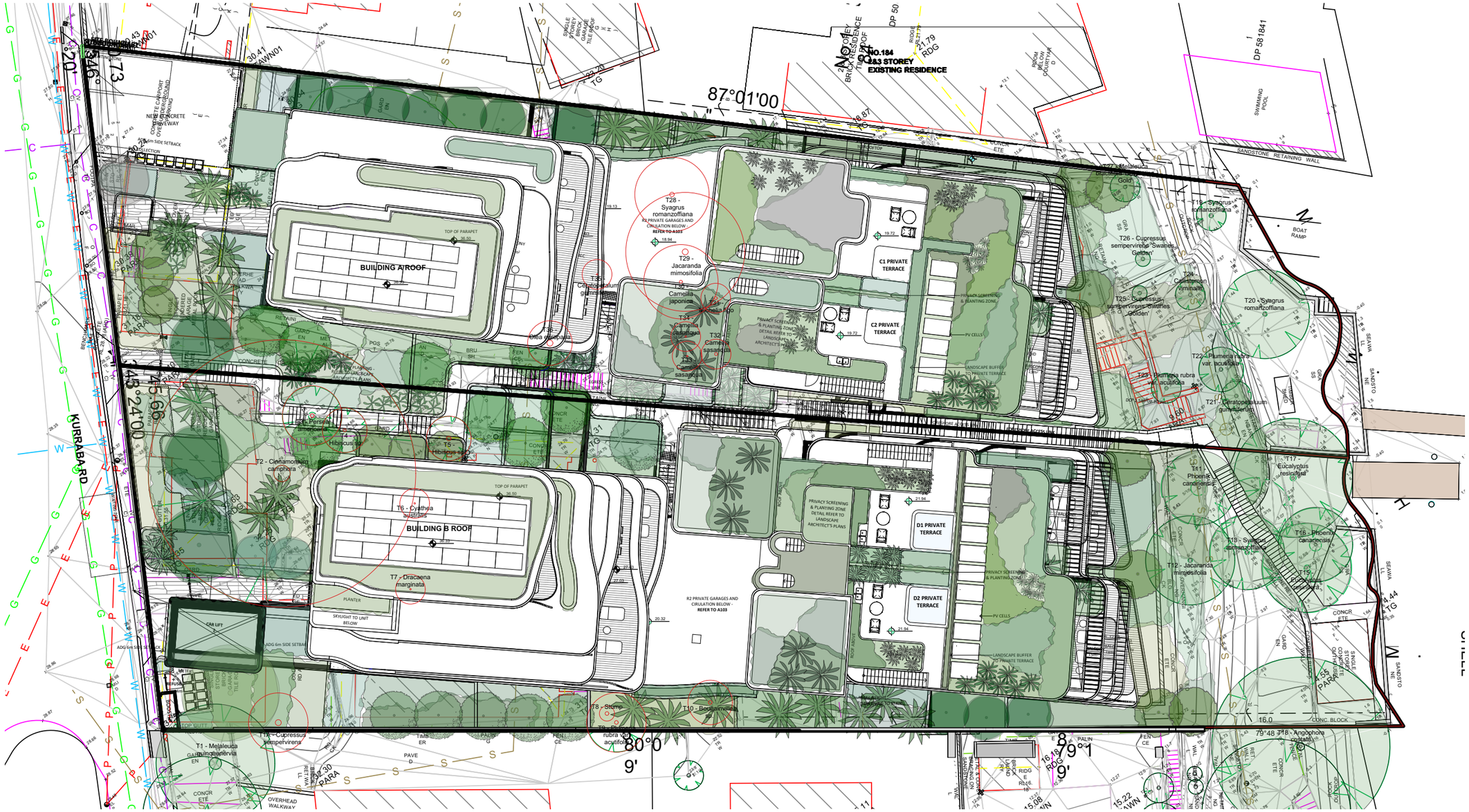
Tapered, solid masonry walls are strategically placed to create privacy between residences where needed. Perimeter planters reduce overlooking and create privacy between levels.

Integrated Landscape

Landscape is integral to the façade design and overall architectural identity of the project, providing ‘green breaks’ in the building form. Plentiful planting mitigates any heat island e□ects on site and promotes health and wellbeing for residents by increasing their connectivity to the natural environment.

The landscaping will feature native species that are well adapted to local environmental conditions, bringing bene□ts such as improved air quality and shielding from harsh environmental conditions.





Overall landscape plan

Local Character

The design is detailed with a palette of quality sustainable materials highly appropriate for a site on Kurraba Point. Materiality is informed by the surrounding landscape and hues and textures of the historical urban fabric, creating an architecture that sits comfortably within it's harbourside surroundings yet has its own unique identity.

The light/warm material palette combines elements such as hanging greenery, timber screening, masonry and natural sandstone. Sculptural forms and soft edges are enhanced by the neutral, timeless palette with a subtle layering of colour and texture. Sustainability is considered as a primary criteria in material selection, setting Kurraba point apart from neighbouring developments in it's holistic, full life cycle approach

Sustainability 5.0

Kurraba Point

Buildings are responsible for nearly 40% of annual global greenhouse gas emissions. To achieve sustainable futures, we must cease current practices associated with these negative impacts and depletion of finite resources. We must also look at ways of reversing the existing damage, which could be addressed through regenerative architecture. New buildings can have a 'carbon positive' effect by using sustainable materials and utilising new technologies.

Our strategy for positive impact will address the three key aspects of any sustainable development: Planet, People and Profit.

Planet: Reduce the environmental impact and greenhouse gas emissions associated with 'making' and 'using' a building. The emissions associated with 'making' a building is the embodied carbon in construction materials. The emissions associated with 'using' a building is the energy consumed during operations.

People: Our ultimate measure of success is creating healthy spaces where communities can thrive in life, work and play. The health and wellbeing of end users is now more of a priority than ever. Interiors and building envelope design are particularly key with people spending on average more than 90% of their time indoors. This project is designed to bring a wide range of health benefits through strategies which range from influencing levels of physical activity to increasing natural light and air quality in indoor spaces.

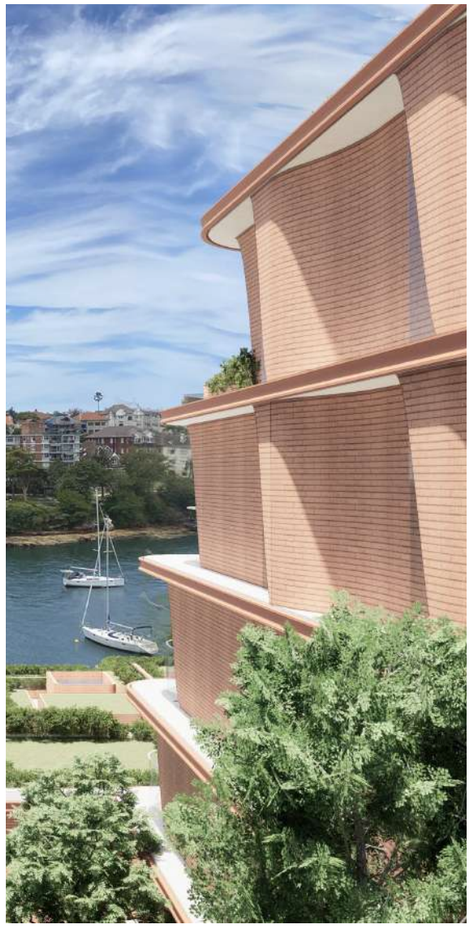
Profit: Healthy, sustainable buildings are profitable for the owner, developer and end user. This can be achieved by utilising renewable energy sources, robust materials and reducing reliance on mechanical means.

Passive Design

PLANET

Biophilic Design

PEOPLE



Resource Efficiency

PROFIT

Environmental Sustainability - The proposal fully utilises passive design strategies and the latest building technology to create a high performing building which is net-zero carbon in both design and operations.

PLANET

- Form
- Materials
- Energy Harvesting/Use
- Water Harvesting/Use
- Technology
- Passive Design Strategies

Social Sustainability - On average, people spend more than 90 percent of their lifetime indoors. The design encourages a wide range of health e□ects, from in□uencing levels of physical activity to daylighting strategies and air quality.

PEOPLE

- Health and Wellbeing
- Green Spaces and Amenities
- Green Transport
- Zero-cabon Lifestyle/Mindset

Economic Sustainability - The economic value of sustainable developments includes higher asset value for owners and property developers, increased occupancy rates and decreased operating costs and utility bills through increased resource e□ciency. Sustainable developments are 'future proof' and have greater resilience to the e□ects of climate change. There are an increasing amount of □nancial incentives and subsidies available to o□set higher initial investment.

PROFIT

- Robust materials
- Low running costs through strategies such as energy e□cient lighting and performance control systems
- Green building incentives
- Resilience

Principles and Megatrends

CARBON NEUTRAL

- Fossil Fuel Free
- Solar Panels
- Integrated Landscape and Planting
- Building Geometry
- Building Envelope
- Passive Design Strategies
- Geothermal energy harvesting
- Sustainable transport options

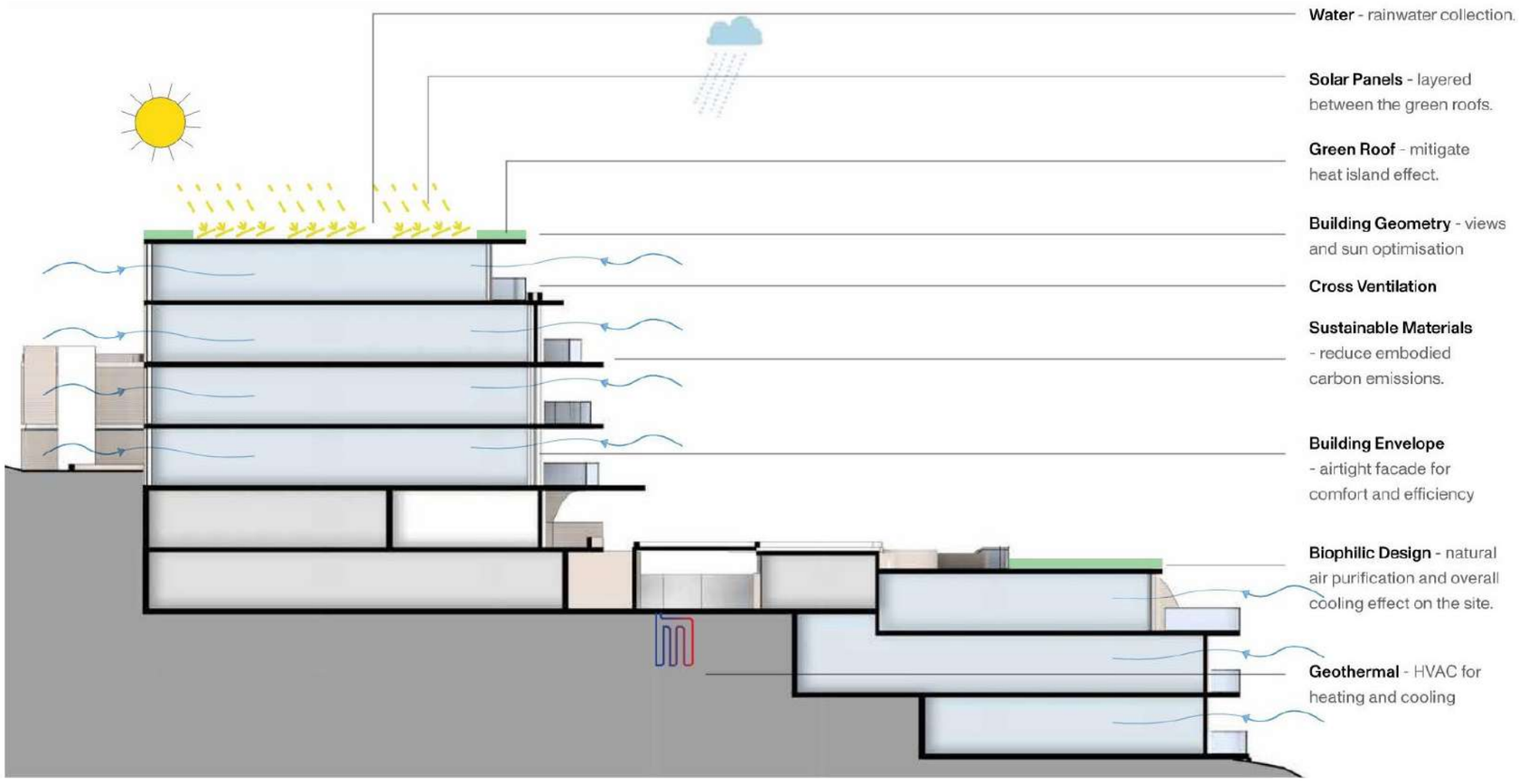
RESPONSIBLE ARCHITECTURE

- Rainwater harvesting
- Minimise waste in design, construction and operations
- Sustainable materials - local, low embodied carbon

- PEOPLE'S HEALTH & WELLBEING
- Biophilic Design and Planting - physiological and psychological bene□ts
- Amenity - sunlight, clean air and views

WORLD GREEN BUILDING COUNCIL

Kurraba Point



Indicative Section

Water - rainwater collection and recycling system

Solar Panels - rooftop solar photovoltaic system

Biophilic Design - green roof and integrated planters provide natural air puri□cation and overall cooling e□ect to the site.

Building Geometry - views and sun optimisation

Building Envelope - airtight facade for comfort and e□ciency. Operable windows and screens for natural ventilation.

Solar control - integrated shading screens for privacy and heat/glare mitigation

Sustainable Materials - reduce embodied carbon emissions

Resource E□cient- energy e□cient LED lighting and WELS star rated □xtures

Building Management System - Control systems to monitor and maximise building performance.

Geothermal - HVAC for heating and cooling

Electric Vehicles - Charging provisions for electric vehicles and bicycles

HEALTHY MATERIALS

SUSTAINABILITY METRICS	THIRD PARTY CERTIFIED - LEVEL A
LOW CARBON MATERIALS	LOCALLY SOURCED
LOWER LIFE CYCLE IMPACTS	RESPONSIBLE BUILDING MATERIALS
RECYCLABLE	LESS WASTE IN PRODUCTION

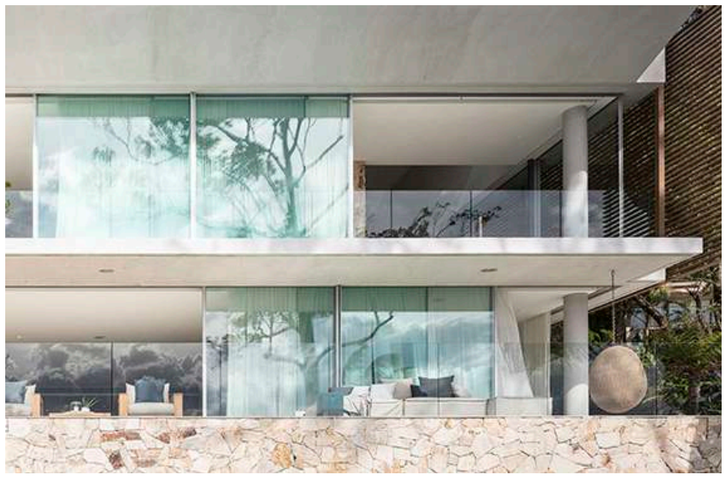
RECYCLED/RECYCLABLE BRICK

NATURAL STONE

FSC TIMBER SCREENS

BEE BRICKS

LOW CARBON CONCRETE



HIGH PERFORMANCE GLAZING

5.5 Green Star
Target: 6 Green Star - World Leadership

Green Building Council Australia

Responsible
- Industry development
- Responsible construction
- Verification & Handover
- Responsible procurement
- Responsible structure
- Responsible envelope
- Responsible systems
- Responsible finishes

Healthy
- Clean air
- Light quality
- Acoustic Comfort
- Exposure to toxins
- Amenity and comfort
- Connection to nature

Places
- Movement and place
- Enjoyable places
- Contribution to place
- Culture and heritage

People
- Inclusive construction practices
- Indigenous inclusion
- Procurement and workforce inclusion
- Design for inclusion

Resilient
- Climate change resilience
- Operations resilience
- Community resilience
- Heat resilience
- Grid resilience

Positive
- Upfront Carbon Use
- Energy Use and Source
- Water Conservation
- LCI and Analysis

Nature
- Impacts to nature
- Biodiversity enhancement
- Nature connectivity
- Nature stewardship
- Waterway protection

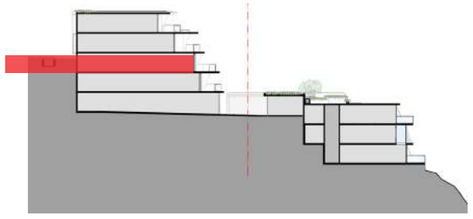
Leadership
- Market Transformation
- Leadership Challenges

Parking, Access and Services

6.0

Kurraba Point

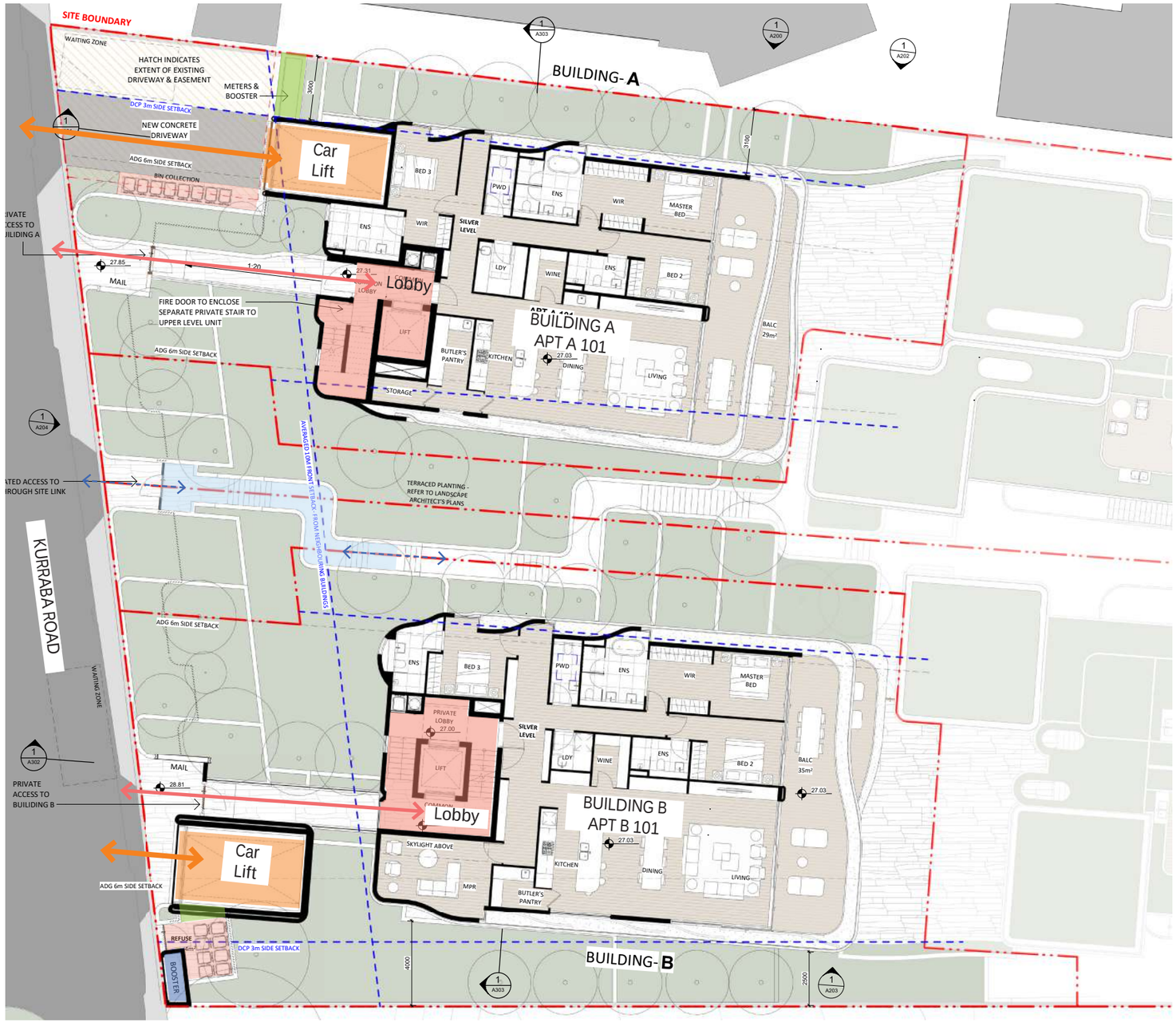
Despite the steep grade of the site, the private pedestrian walkway creates a path of travel through the development to the waterfront residences. Kurraba Road residences have direct street access. All vehicles access underground basement levels via two dedicated car lifts from the driveway entry points on Kurraba Road.



R4 Level 1 Floor Plan

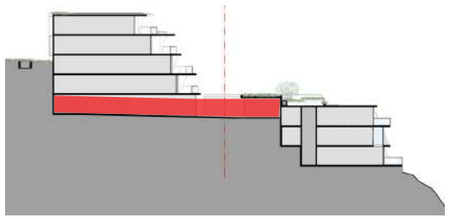
- Vehicle access - driveway to car lift
- Car lift
- Gated access to private pedestrian walkway - pathway with stairs
- Private residential access
- Common lobby and building core
- Booster
- Meters
- Waste/Refuse Area

0m 5m



Kurraba Point

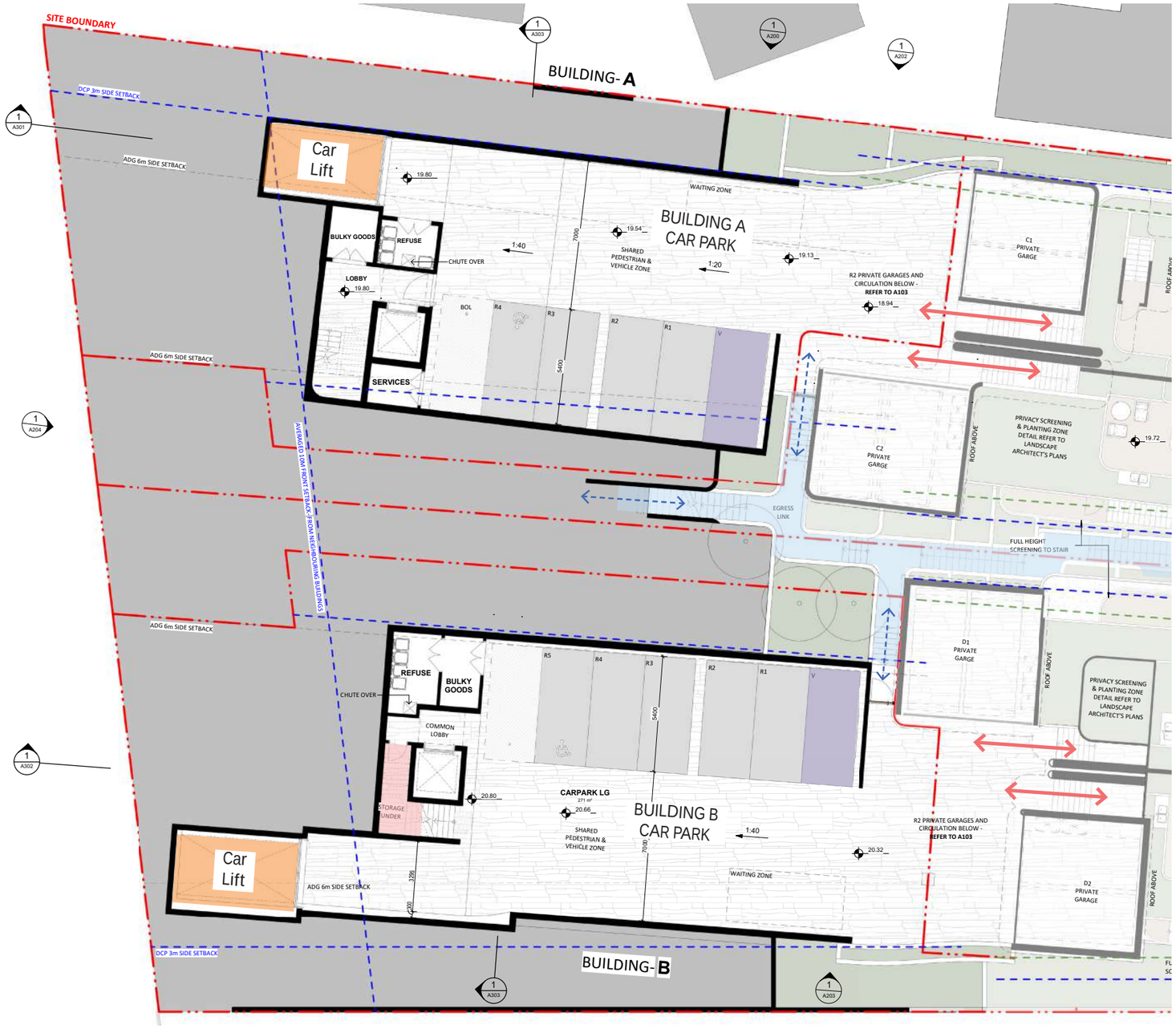
Two basement levels are cut into the topography of the site and located under Building A and B footprints. The car lift provides vehicular access between levels. Visitor parking is located on the first parking level and the second provides access to the private garages for the waterfront residences. Secure underground bicycle parking is consolidated on the first parking level in an enclosed space accessible via residential lift lobbies.



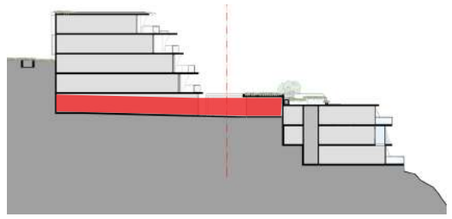
R4 Lower Ground Floor Plan

- Car lift
- Private pedesrian access to lower level residences - pathway with stairs
- Residence Access
- Visitor Parking
- Bicycle Parking
- Storage

0m 5m



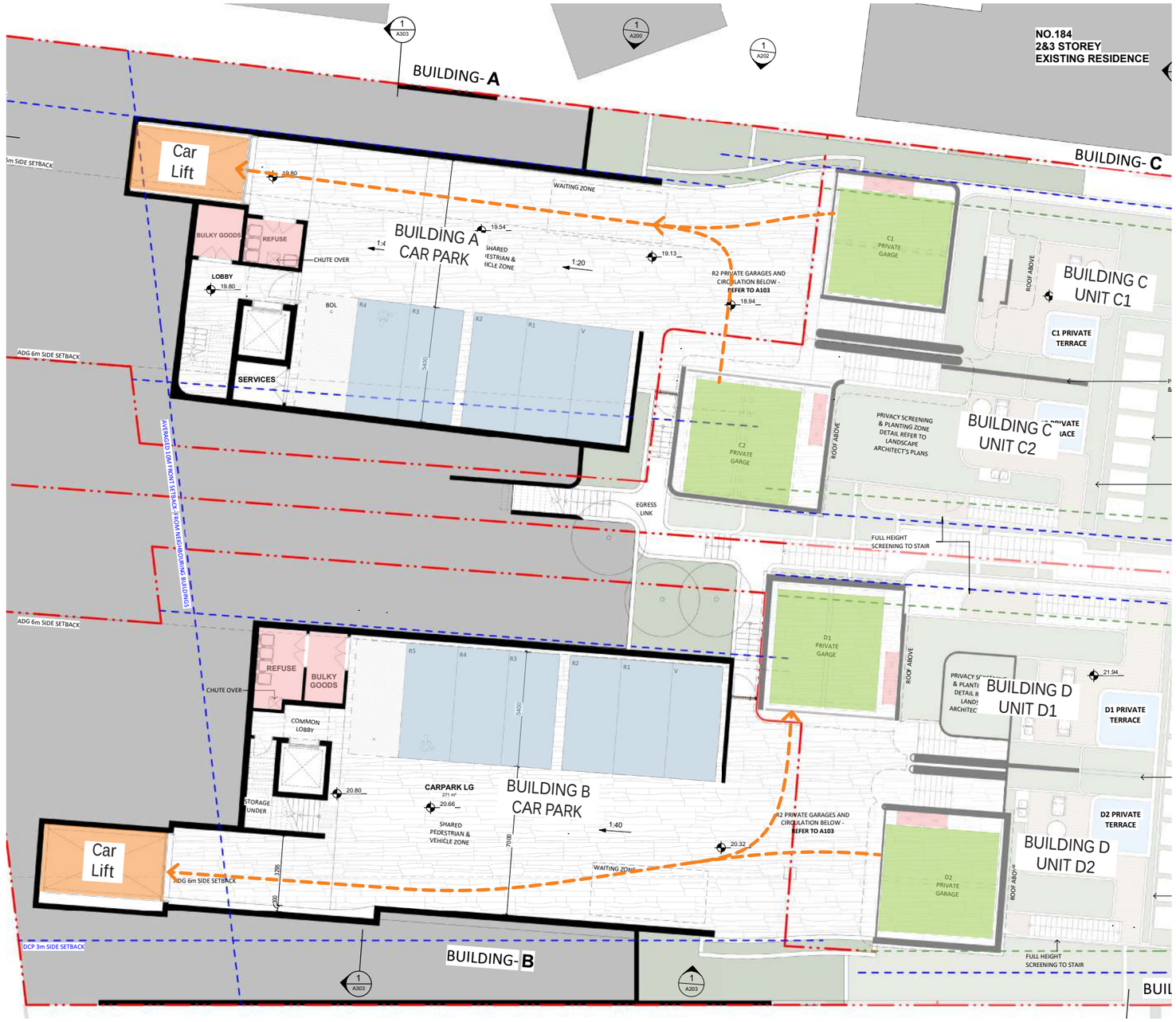
Each resident is responsible for transferring their household waste to the central waste room at the core on Basement 1. Waterfront residences have private waste storage areas for 240L bins. Waste and recycling collection services will be provided by North Sydney Council at Kurraba Road, where a curbside refuse area has been designated. Each residence has separated mechanical and hot water systems, but geothermal and photovoltaic cells are utilised for common power generation. Boosters and meters are located on Kurraba Road.



R4 Lower Ground Floor Plan

- Car lift
- Vehicle access - car lift to Building C/D private garage
- Visitor Parking
- Resident Parking (R4 Zone)
- Private Garage (R2 Zone)
- Waste/Refuse Area
- Building Services

0m 5m



Amenity 7.0

Kurraba Point

Winter Solstice - 9AM

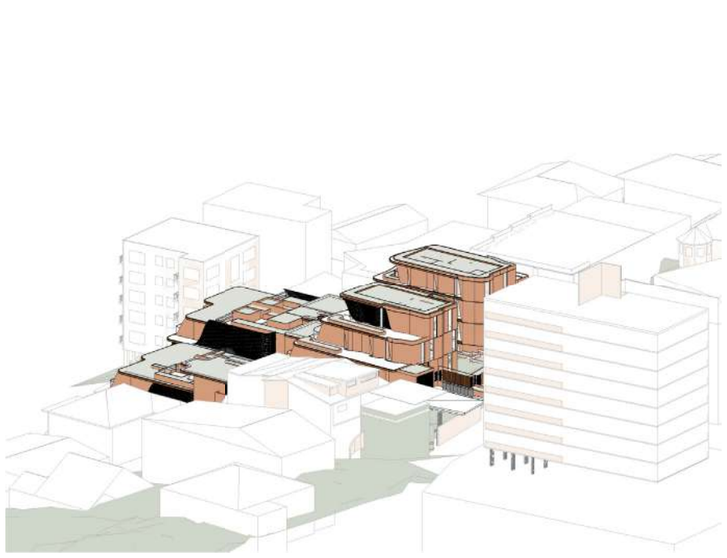
Winter Solstice - 12PM

Winter Solstice - 3PM

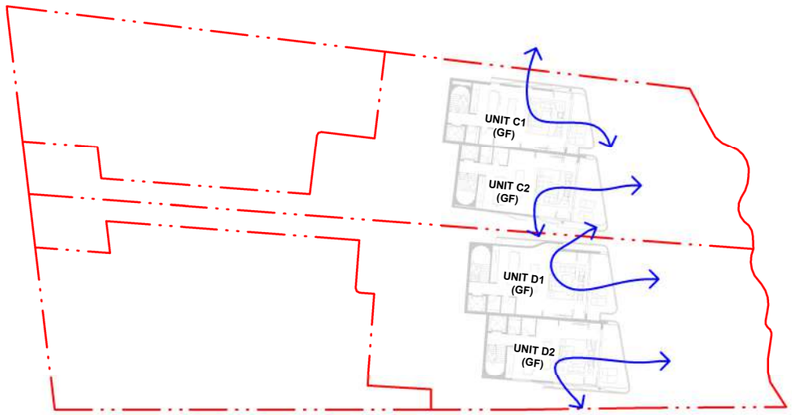
Kurraba Point

Winter Solstice - 9AM

Winter Solstice - 12PM



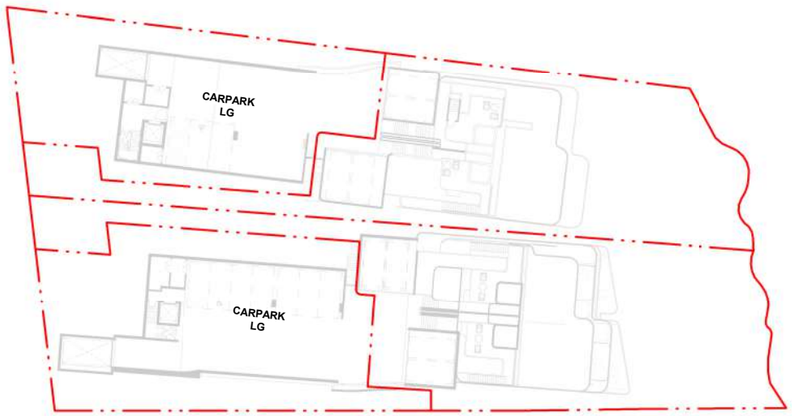
Winter Solstice - 3PM



LEVEL R2-GROUND - CROSS VENTILATION (4/4)

LEVEL R2-L01 - CROSS VENTILATION (4/4)

LEVEL R2-L02 - CROSS VENTILATION (4/4)



LEVEL R2-ROOF / R4 LG - CROSS VENTILATION

LEVEL R4 GROUND - CROSS VENTILATION (2/2)

LEVEL R4-L01 - CROSS VENTILATION (2/2)

LEVEL R4-L02 - CROSS VENTILATION (2/2)

LEVEL R4-L03 - CROSS VENTILATION

CROSS VENTILATION = 10 / 10 = 100%

NO.	REVISION	BY	CHK	DATE
1	PRE-LODGEMENT			20.01.2022
2	AMENDED COORDINATION ISSUE	AL	RPW	19.05.2022
3	DA ISSUE	RPW	AC	08.06.2022
4	COUNCIL RFI COORDINATION ISSUE	AL/DK	RPW	31.07.2023
5	COUNCIL RFI ISSUE	AL/DK	RPW	15.08.2023

REVISION NOTES:

KEY PLAN

CLOUD LEGEND
REVISION
ON HOLD

OTHERS

CLIENT
Kurraba Point Road Pty Ltd
430 TOORAK ROAD, TOORAK 3142

ARCHITECT
SUITE 41 & 42, LEVEL 4
61 MARLBOROUGH ST
SURRY HILLS, NSW 2010
T 02 9698 8510
ABN 63 131 365 896
NOMINATED ARCHITECT:
KOICHI TAKADA
NSW ARCHITECTS 6901
VIC ARCHITECTS 16179
QLD ARCHITECTS 5590
KOICHITAKADA.COM

Koichi Takada Architects

QA STAMP

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PROJECT
190 KURRABA RD
190 KURRABA RD, KURRABA POINT NSW 2089

DWG TITLE
CROSS VENTILATION

STATUS
DEVELOPMENT APPLICATION - RFI 01

DWG NO.
A420

REVISION
5

SCALE
1

DATE
15.08.2023

Photomontages 8.0

Kurraba Point

Before

After

View taken from 143 Kurrba Road, looking south towards site.

Before

After

View taken from 190 Kurrba Road, looking north-east towards site.

Before

After

View taken from Shell Cove, looking west towards site

Before

After

View taken from Shell Cove, looking west towards site and city

Before

After

View taken from Cremorne Point, looking west towards site.

Before

After

View taken from Cremorne Reserve, looking west towards site.

RFI Responses 9.0

Detailed Modifications by RFI Number

RFI Ref.	Sheet Ref.	Change Description
1	A410, A411, A415, A416, A630.	Height planes for the R2 and R4 zones have been updated to show extrapolated topography in accordance with the Bettar v Council method, as outlined in Council's RFI. A diagram showing the survey points used to generate these diagrams has also been provided – refer to sheet **A630.** The footprint of building D has been reduced by pulling back from the waterfront, to minimise exceedance over the new height plane.
2	A101, A102, A103, A104	KTA's GA plans have been amended to show the foreshore building line as provided by LTS. The footprints of buildings C and D have been reduced by pulling the ground level terraces back from the foreshore zone, ensuring there is no building element encroaching on the foreshore building line.
3	A012, A103, A104, A301, A302, A303, A660, A661.	The design of buildings A, B, C & D has been amended to significantly reduce the amount of excavation required. An entire level of basement excavation has been deleted under buildings A and B, with the car parking now limited to R2 level 2 / R4 lower ground. To accommodate this change, the R2 zone private garages have been raised and now sit approximately level with the car parking level of the R4 RFBs. KTA has provided cut and fill plans and retaining wall detail plans – refer to sheets A660 and A661.
4	A690, A691, A692, A693, A694.	Plans have been provided to show the viability of a scheme on A84A Kurraba Road – refer to drawings A690, A691, A692, A693 and A694.
5	A401, A403	KTA has amended combined site calculation diagrams.
6	A105, A475, A476	Units A001 and B001 have been nominated as adaptable apartments. Plans have been provided to show these units in their pre and post adapted states.
7	A001 A105	Unit A001 has been changed from a 3 bed to a 2 bed unit. This updated mix is reflected on the project summary sheet.
8	A012, A103, A104, A301, A302, A303, A650	See item 3. The terracing on the site has been rationalised. Wherever possible, the existing ground line has been retained to reduce the extent of terracing required. Sheet A650 illustrates the reduction in terracing to the site boundary areas.
9a	A101, A102, A103, A104	Building C has been amended and now sits entirely within the required setbacks to the side (northern) boundary. The stair that provides dwelling C1 access to the private roof terrace is now contained wholly within the setback and within the building envelope. Several planters have been deleted where deemed not easily accessible. All stairs providing access to the private roof top terraces have been provided with screening. No windows facing the side boundaries encroach into the required setback. Additional setback dimensions have been provided.
9b	A101, A102, A103, A104	Plans have been amended to show a setback line taken from 184A Kurraba Road and 192A Kurraba Road. Building D has been pulled back to this line, providing additional view access for residents of 192A to the south.
9c	A105, A106, A107, A108, A109, A301, A302, A414, A620.	The rear setbacks for the R4 zone have been amended to reflect a height plane setback 1.5m from the rear boundary, commencing at 3.5m above existing ground and projecting back into the site at a 45° angle. KTA has provided a diagram to indicate how an average existing ground line has been calculated for the purposes of the updated height plane – refer sheet A620. Buildings A and B within the R4 zone have been pulled back from the rear boundary to reduce the amount of exceedance over this setback plane. This has resulted in a significant reduction to these building envelopes and addressed the perceived 6-storey form of the building. Note – the removal of the R4 basement level has also served to address this point.
10	A421	KTA have prepared an additional setback diagram to illustrate compliance with and uppermost incline plane of 36° within the R4 zone – refer to drawing sheet A421**.**
11	A401	KTA have amended their site calculations to reflect the inclusions and exclusions stipulated in the RFI, including the exclusion of the right-of-carriageway easement from the site area. Combined figures have been provided showing compliance for the entire site.
12	A401, A403	Refer to item 11
13	A104, A105, A106, A107, A108	The private terrace areas on the R2 dual occupancy units have been significantly reduced. This allows for larger buffer zones between at the interface with the R4 buildings, to the side (north and south) boundaries and between the terraces. This increased buffer provides opportunities for dense, screening landscaping. Concerns of privacy and overlooking from the R4 buildings have been addressed as follows: • Ground and level 1 – additional screening has been provided to the balconies facing the side (north and south) boundaries • Level 2 – the wrap-around balconies have been deleted so there are no balconies facing the side boundaries. Additional screening has been provided to the east facing balconies, where they overlook the side boundaries. Planters have been added to buildings A & B to provide additional screening to the north and south elevation. • Level 3 – as per level 2. • Overlooking to the dual occupancy private roof top terraces has been mitigated by reducing the size of these terraces, allowing for dense, landscape screening.

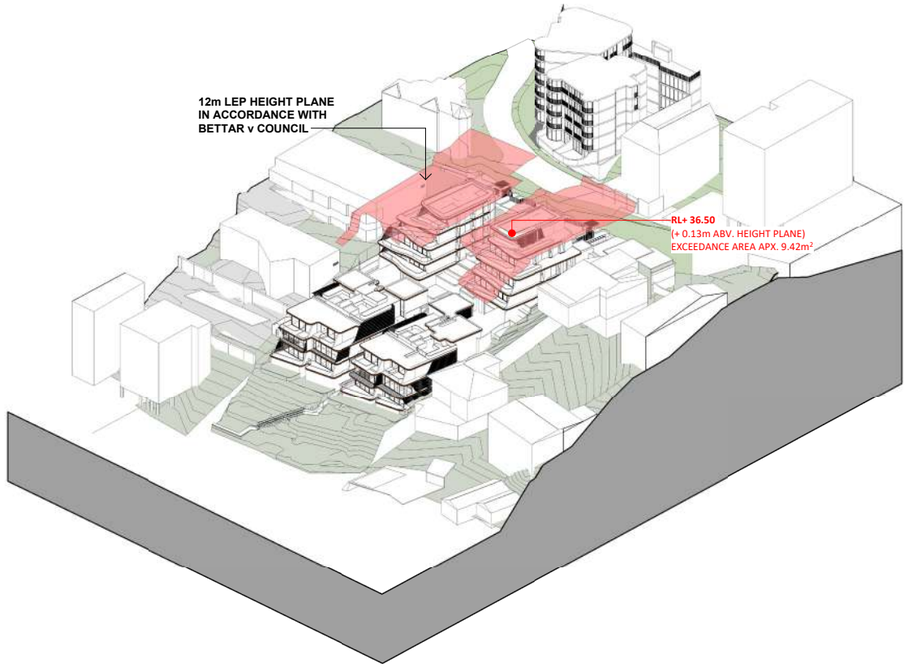
14		The R2 dual occupancy units will have area within the foreshore zone as part of their title. The spatial allocation is approximately as below: • C1 120m^2 • C2 147m^2 • D1 143m^2 • D2 119m^2
15	N/A	By Others.
16	A001, A104	Car parking has been amended in accordance with the RFI and quoted DCP rates: Building A - 2x 3bed units = 3 bays - 1x 2bed unit = 1 bay - 1x visitor – 1 bay - Total – 5 Bays (one of which is an accessible residential bay) Building B - 3x 3bed units = 4.5 (5) bays - 1x visitor – 1 bay - Total – 6 Bays (one of which is an accessible residential bay) - Total across scheme – 11 bays. Note – It is prudent to assess each of the R4 buildings individually. As there is no direct access between these two buildings, they cannot share car parks and therefore an aggregate figure would leave one building severely disadvantaged from a parking standpoint.
17	A106	Following advice from the Traffic engineer, the car lifts for buildings A and B have been widened slightly. This allows for a swept path that facilitates and waiting zone in the right-of-carriageway easement for in the case of building A, and kerbside directly in front of building B.
18	A106	The raised planter facing the street has been simplified and increased in depth, providing a more generous landscape zone and reducing the appearance of structure at the street front. The enclosed meters / refuse zone at the north-west corner of building A has been deleted. The refuse collection zone at the south-west corner of building A has been reduced.
19	A002, A003, A004, A200, A201, A202, A203, A204, A205, A206, A500	KTA has amended the proposed material palette in accordance with the RFI. The light colour brick which dominates the facade has been replaced with an earthy tone brick. The slab edges, which per previously shown as being finished in white render, are now proposed to be finished in a darker, earthy tone render.
20	A002, A106, A107, A108,	Additional windows have been added to the street facing elevation. These windows serve a range of different internal spaces – lobbies, bedrooms, multipurpose rooms and living areas – this ensures a range of uses providing increased passive surveillance to Kurraba Road and creating a more active and open street frontage.
21	A105	In keeping with Council's suggestion, the skylights to the R2 private garages have been deleted and replaced with landscaping.
22	All	• Building Setbacks – Refer to item 9 • Landscaped area and design – refer to Item 8 and 12. The terracing and retaining strategy has been amended to ensure a quality landscaping outcome can be achieved. • Building services including emergency access – Allowances have been made in the design for the provision of services, to be coordinated at a future stage. Emergency access and servicing will be via the central access link, the primary building entries and the car park entry. • Amenity of buildings and design of openings – The openings of these buildings have been designed to maximise access to the desirable harbour views while minimising cross viewing. The apartments and dual occupancy units are oriented to the views, with uninterrupted glazing to the eastern facades. • Additional openings to the central walkway to active the space and provide the perception of surveillance – the southern elevation of building A is nearly completely glazed – this, coupled with controlled, slot views from building B provides adequate surveillance to the central access zone. The central zone is accessible from the top of the site and the common car park areas at the lower levels. • Increase the size and number of windows to the bedrooms throughout – measures have been taken to increase the glazing to bedrooms, especially in the north-western corner of buildings A & B. Throughout the scheme, privacy for the residents is a design priority and this informs the size and aspect of the bedroom glazing. • Eliminate excessive hallway space, especially in the R4 RFBs – KTA has used internal corridors to create separation between the public and private areas of the apartments. These corridors are part of KTA's gallery concept – the will be of a high finish and have feature glazing / large doors at one end to allow access to light and air. • Extent of excavation – refer to item 3

23	N/A	By Others – Surveyor
24	N/A	By Others – Civil Engineer
25	N/A	By Others - Surveyor
26	N/A	By Others – Heritage Consultant
27	A104, A105, A106, A107, A108	The cores of buildings A & B have been amended to include a refuse chute and recycling bin. The temporary bin holding zones for the northern and southern zone are located within 2m of the street alignment and have capacity for 8x 240L bins.
28	N/A	By Others – Arborist
29	N/A	
30	A110, A620	Sheet A110 provides an overlay of the existing site levels to allow for an assessment of the proposed building heights. Side and rear setbacks within the R4 zones have been updated in accordance with the RFI and shown on all relevant drawings. Diagrams showing how the existing ground level has been calculated for these setbacks have been produced – refer to sheets A620.

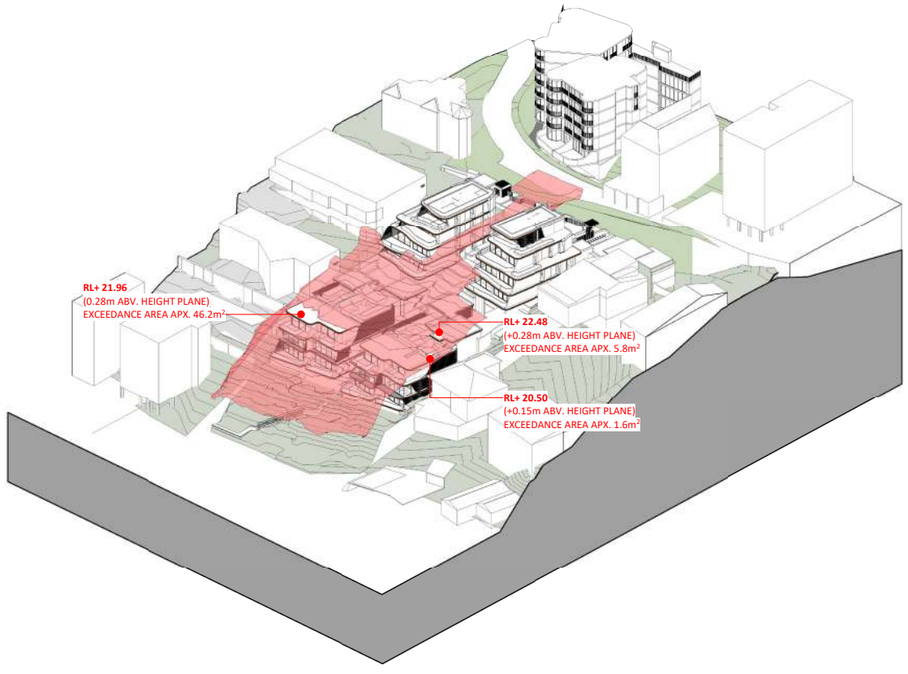
End of Document

RFI Item 1

Height planes for the R2 and R4 zones have been updated to show extrapolated topography in accordance with the Bettar v Council method, as outlined in Council's RFI. A diagram showing the survey points used to generate these diagrams has also been provided – refer to sheet A630. The footprint of building D has been reduced by pulling back from the waterfront, to minimise exceedance over the new height plane.

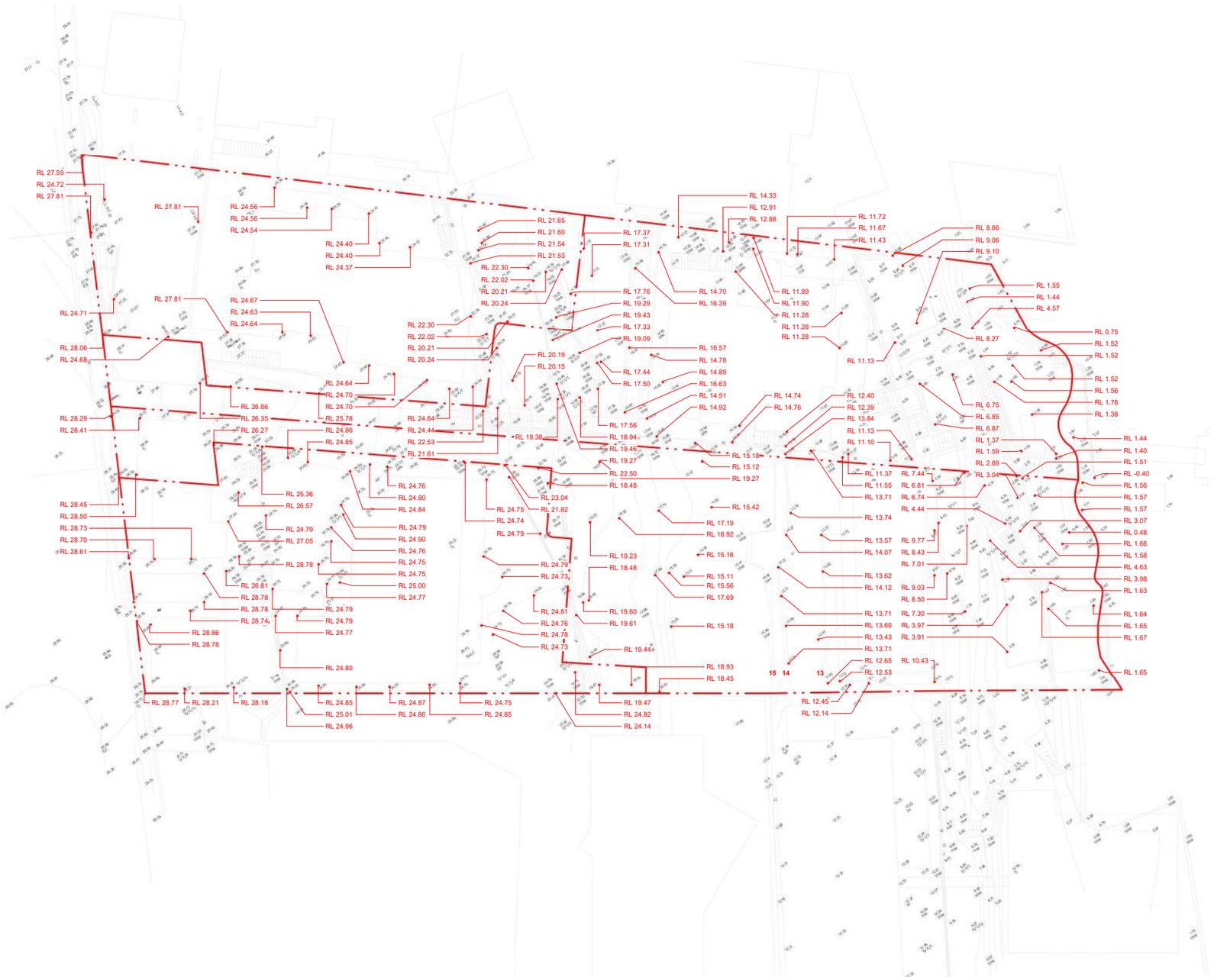


R4 HEIGHT PLANE DIAGRAM - 12m ABOVE
EXISTING GROUND LEVEL (VIEW 1)



R2 HEIGHT PLANE DIAGRAM - 8.5m ABOVE
EXISTING GROUND LEVEL (VIEW 1)

RFI Item 1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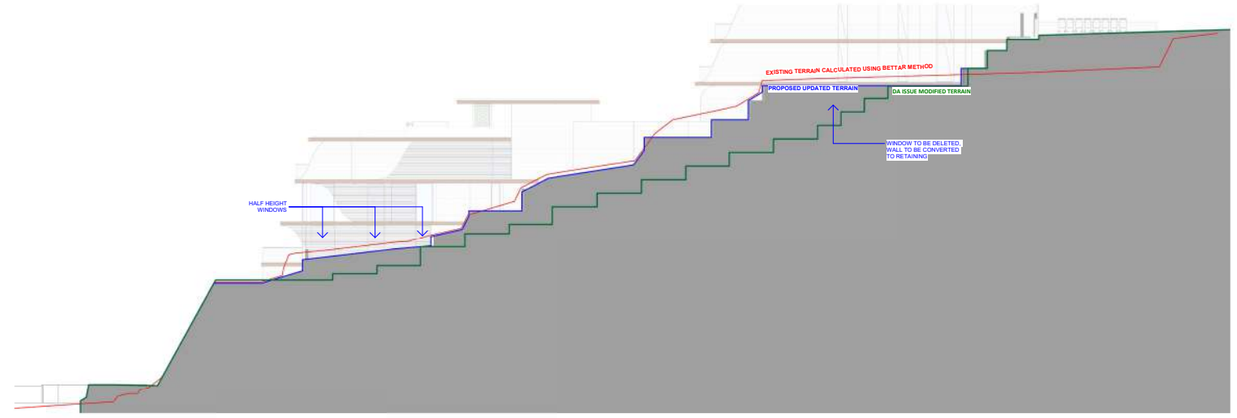
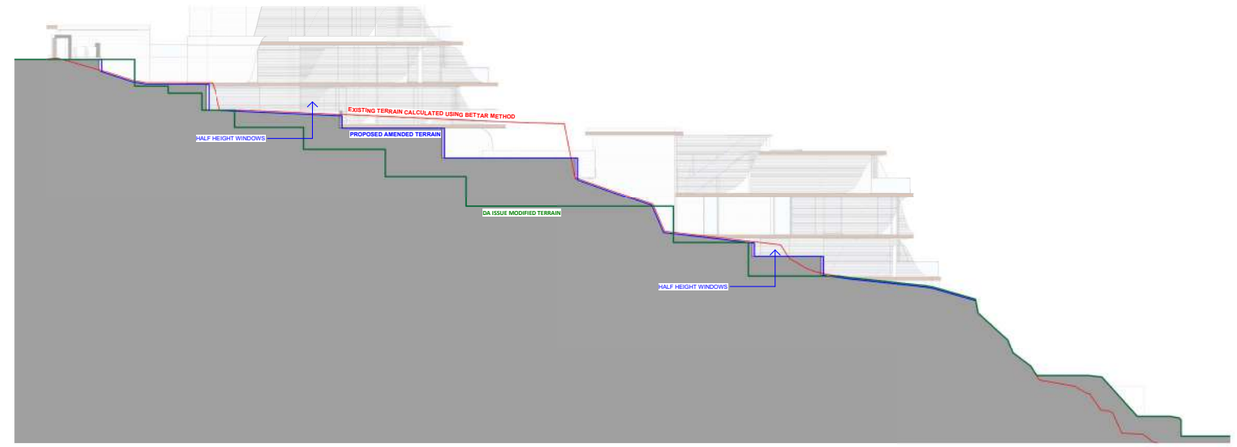
RFI Item 3 & 8

The design of buildings A, B, C & D has been amended to signi□cantly reduce the amount of excavation required. An entire level of basement excavation has been deleted under buildings A and B, with the car parking now limited to R2 level 2 / R4 lower ground. To accommodate this change, the R2 zone private garages have been raised and now sit approximately level with the car parking level of the R4 RFBs. KTA has provided cut and □ll plans and retaining wall detail plans – refer to sheets A660 and A661.

The terracing on the site has been rationalised. Wherever possible, the existing ground line has been retained to reduce the extent of terracing required. Sheet A650 illustrates the reduction in terracing to the site boundary areas.

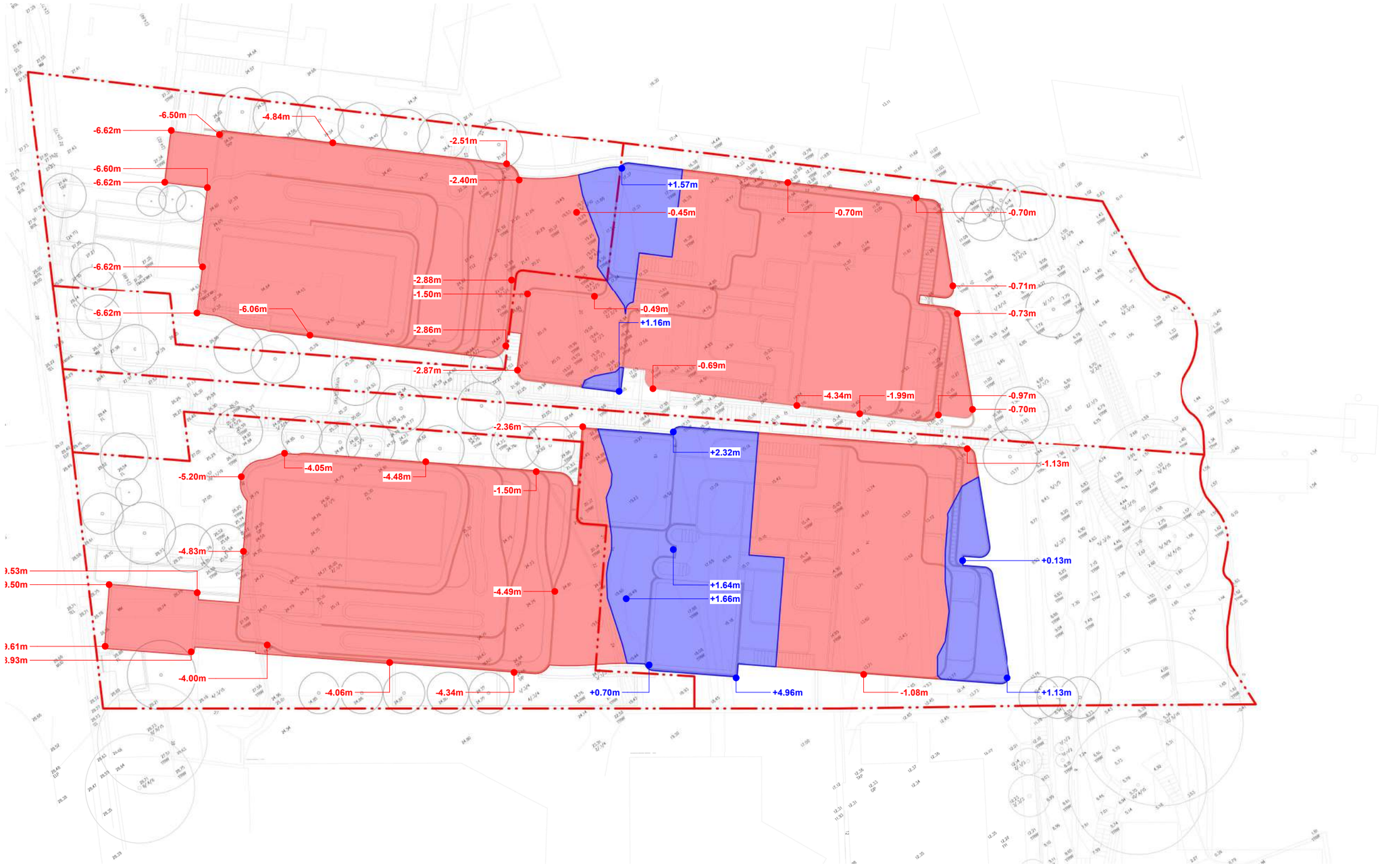


A SECTION A - NORTHERN BOUNDARY LEVELS
1 : 150



B SECTION B - SOUTHERN BOUNDARY LEVELS
1 : 150

RFI Item 3 & 8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+1.13m

RFI Item 8

The proposed excavation and terracing has been amended to reduce the amount of habitable rooms below ground level. Generally, non habitable areas such as storage rooms have been located in areas requiring excavation.

Diagrams have been provided to illustrate the amenity of habitable rooms below ground level.

RFI Item 8

VIEW POINT 1

VIEW POINT 2

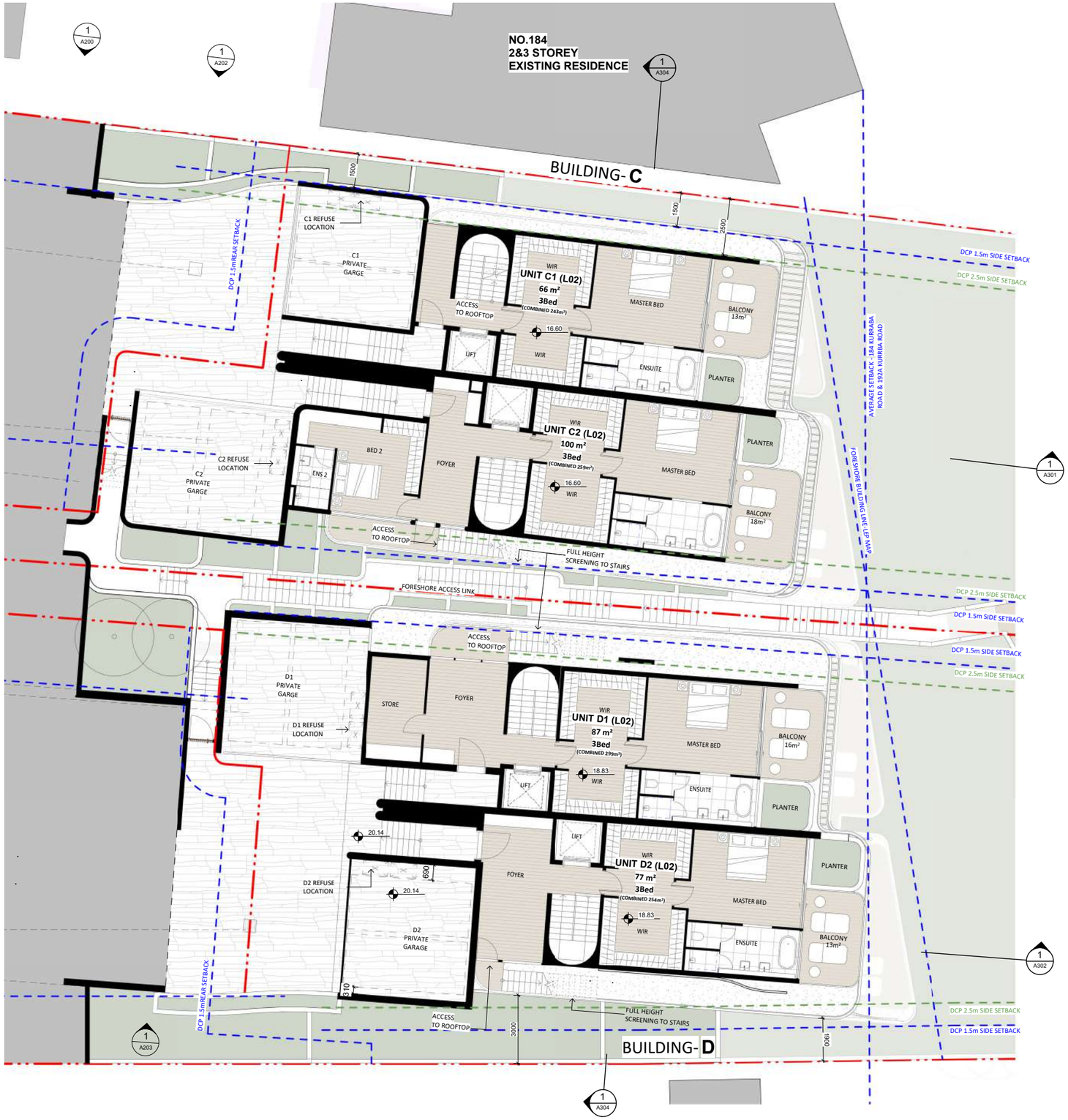
VIEW POINT 3

VIEW POINT 4

RFI Item 9

Building C has been amended and now sits entirely within the required setbacks to the side (northern) boundary. The stair that provides dwelling C1 access to the private roof terrace is now contained wholly within the setback and within the building envelope. Several planters have been deleted where deemed not easily accessible. All stairs providing access to the private roof top terraces have been provided with screening. No windows facing the side boundaries encroach into the required setback. Additional setback dimensions have been provided.

Plans have been amended to show a setback line taken from 184A Kurraba Road and 192A Kurraba Road. Building D has been pulled back to this line, providing additional view access for residents of 192A to the south.



RFI Item 9

The rear setbacks for the R4 zone have been amended to re□ect a height plane setback 1.5m from the rear boundary, commencing at 3.5m above existing ground and projecting back into the site at a 45o angle. KTA has provided a diagram to indicate how an average existing ground line has been calculated for the purposes of the updated height plane – refer sheet A620.

Buildings A and B within the R4 zone have been pulled back from the rear boundary to reduce the amount of exceedance over this setback plane. This has resulted in a signi□cant reduction to these building envelopes and addressed the perceived 6-storey form of the building. Note – the removal of the R4 basement level has also served to address this point.