

SUMMARY OF DESIGN CHANGES FOR DOPIE

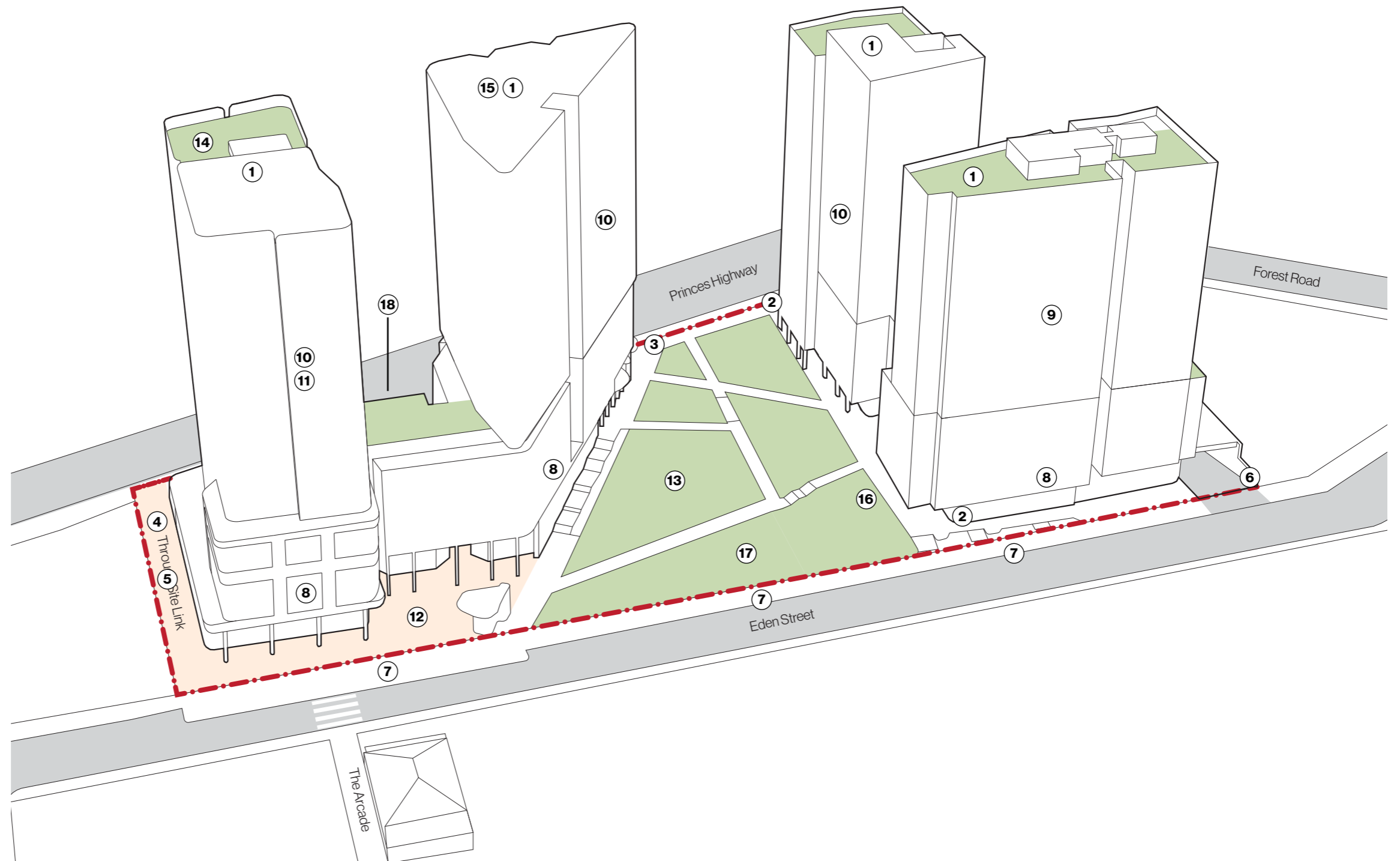
Eden Street Arncliffe

Changes responding to GANSW 5 minutes and subsequent advice, Council ,
DoPIE and TfNSW requests for additional information.

SUMMARY OF CHANGES

Summary of Changes

1. Buildings all compliant with LEP height (Bldg B lift over run is the only exceedance)
2. Childcare moved from Princes Hwy (Bldg. D) to Eden St (Bldg C) & landscape setback to Princes Hwy redesigned to DCP and lobby entry
3. Basements all setback from Princes Hwy Boundary by 3m deep soil, & Lower ground setback 6m for 2/3 of Princes Hwy length
4. Removal of basements from under the entire through site link on the northern boundary
5. Lessened impact to tree 109 TPZ + amendments to lower ground plan retail
6. Retention of tree 03 on Eden St & 40% reduction to driveway crossover via consolidation
7. Additional existing trees retained
8. Building footprints of buildings A, B and C developed to improve cross vent and stronger form articulation
9. Each building individually now meets ADG compliance for cross vent & solar
10. Materials palette of buildings consolidated and further refined
11. Expression of architecture and detailing across towers simplified and unified
12. Meeting place simplified
13. Public Park developed with larger flat area for recreation
14. Communal open space to rooftop of Bldg A revised to sit wholly within LEP height limit (now 2/3 of rooftop)
15. Communal open space removed from Bldg B rooftop and replaced with a green roof and solar farm
16. Bicycle storage clearly defined in basement
17. deep soil zone under park shape adjusted (% maintained)
18. new deceleration lane and left in only ramp access added from Princes Hwy to B01 as requested by TfNSW, public realm adjusted to accommodate

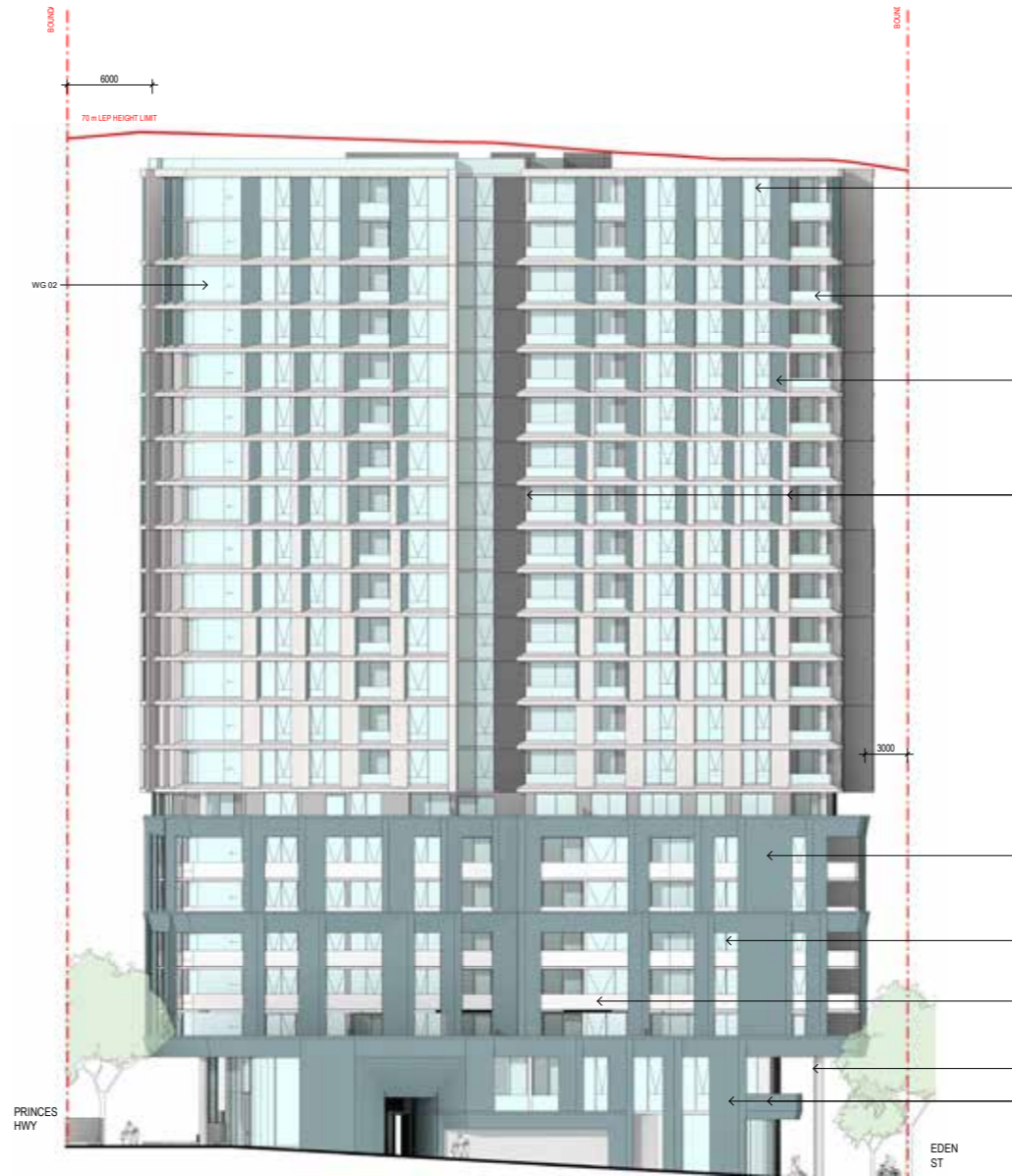


LEP HEIGHT COMPLIANCE

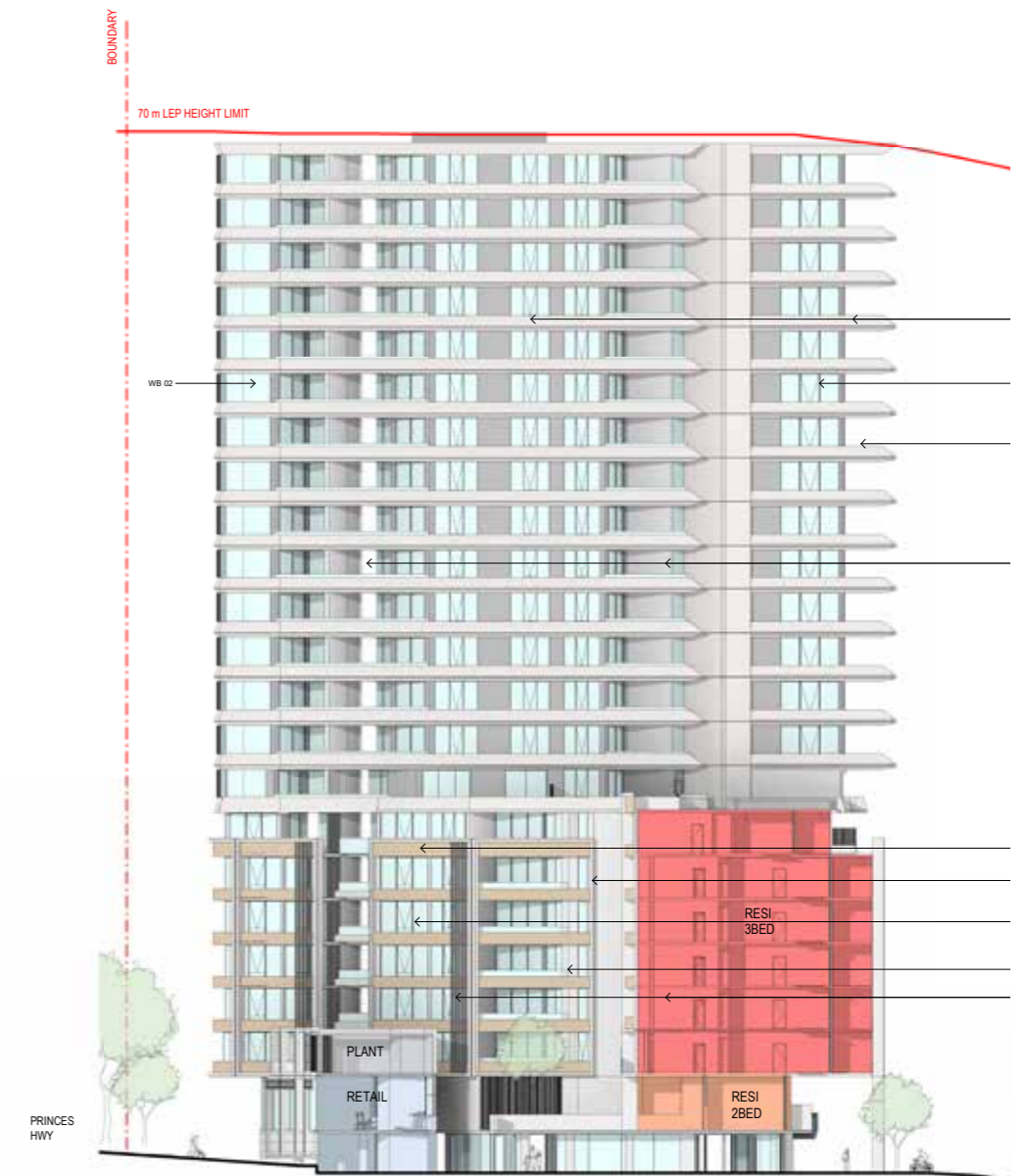
LEP Height Compliance :
Buildings A + B which previously had roof features and enclosed communal area above the height limit have been redesigned to comply with the LEP height.
There is a localised exceedance in building B for the lift over run.

The detailed elevations for each building show the LEP height limit clearly on each elevation, the image to the right is a summarised image with the height limit as it occurs at the boundary.

The roof canopies and crowns of buildings A and B have been removed to provide compliance, and the communal open space that was on top of tower B has been removed and replaced with a green roof and solar farm.



Building A



Building B

CROSS VENT

All building towers have been worked on in form to improve natural cross ventilation and achieve compliance individually. This has had the added benefit of increased form articulation to all towers.

Some towers have also had the opportunity to add additional cross ventilated apartments through the use of plenums. All towers achieve 60% cross vent individually with out plenums, and the addition of plenums provide enhanced amenity over and above compliance.

Building A

- Podium reconfigured to increase cross ventilation
- Tower form stepped for cross vent on northern facade(only counted in lower couple of levels) continued up the tower for form articulation
- Daylight and added ventilation opportunity to corridor through slipping of the western massing to step on either side of corridor extension
- Plenum opportunity direct through lobby cross to 1 bed in tower

Building B

- Condenser farm moved on all levels (podium + tower), to provide clear view from lobby to park, and substantial break in form assisting in cross ventilation and articulation
- Split on north western tower volume to allow additional point of ventilation and daylight to the corridor
- Articulation of tower form to north eastern orientation to increase cross ventilation
- Plenum opportunity to increase cross vent

Building C

- Large step in form facing Eden street to increase cross vent and improve articulation
- Step in form to northern end to increase cross vent and improve articulation
- Step in form to south eastern form to increase cross vent and articulate form

Building D

- Removal of condenser farm in podium for cross vent
- Step in south western podium for improved cross vent

Updated Cross Ventilation

Excluding plenums :

Tower A	61%
Tower B	68%
Tower C	72%
Tower D	67%
Total	64%

Including plenums :

Tower A	63%
Tower B	73%
Tower C	72%
Tower D	77%
Total	72%



Upper Ground



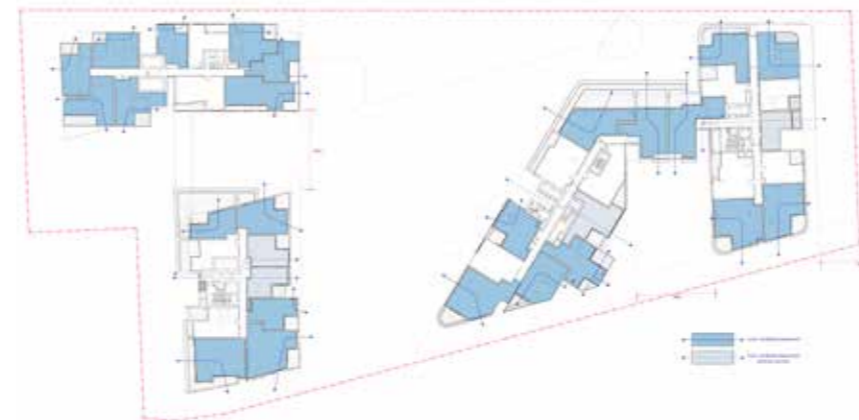
Level 1



Level 2



Levels 3-5



Level 6



Levels 7-8

UPPER GROUND



LEVEL 1



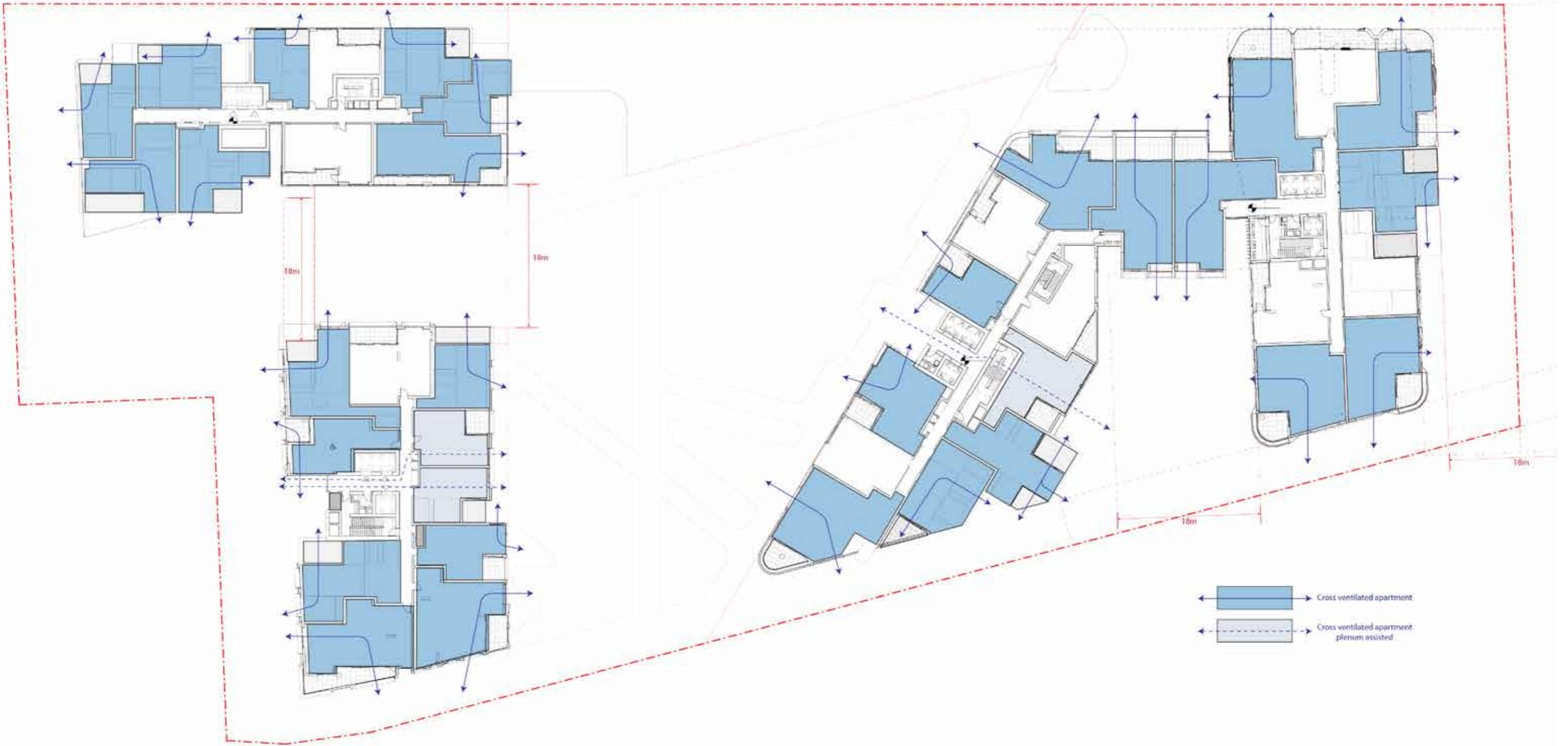
LEVEL 2

NOTE_Level 1 Building C



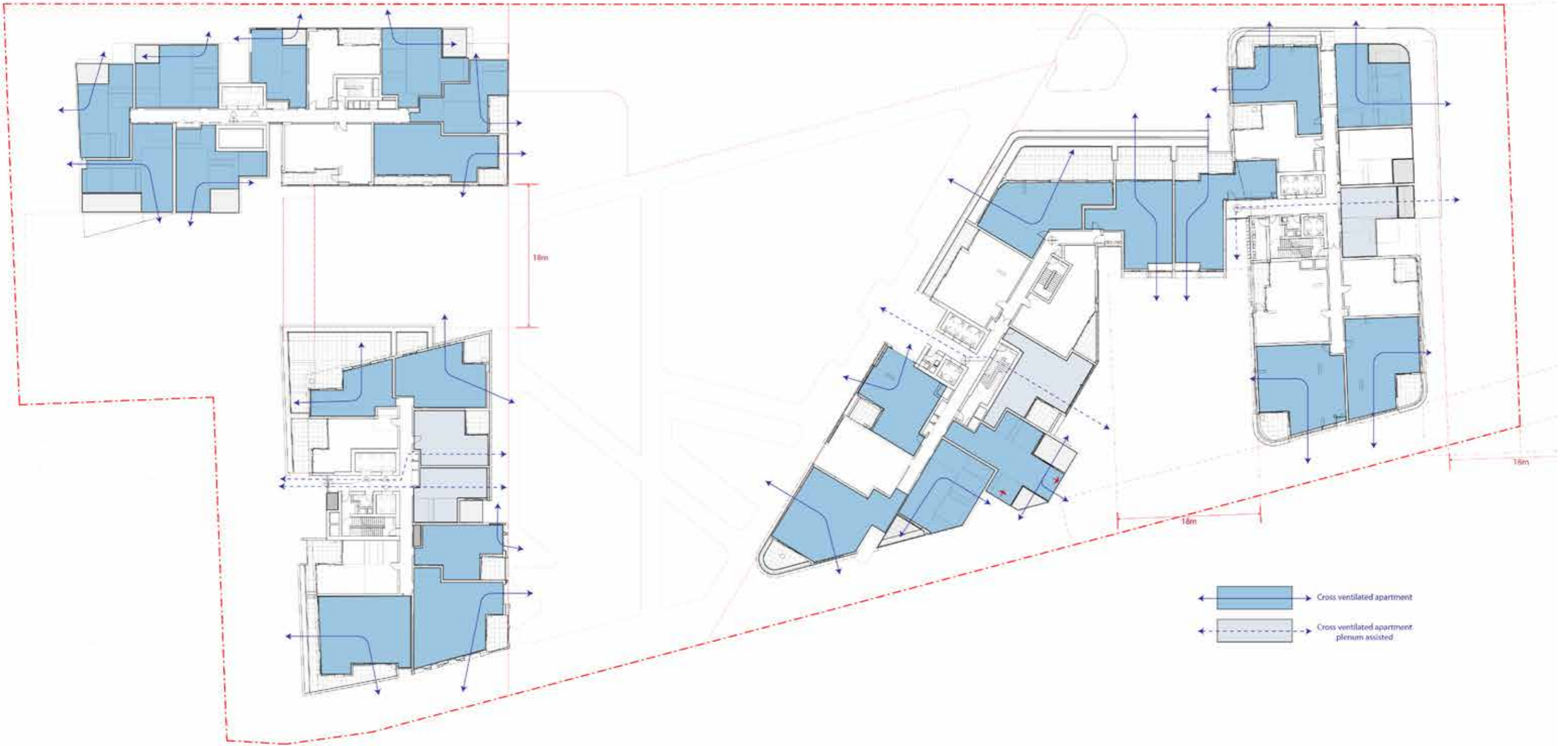
LEVEL 3-5

NOTE_Level 2-4 Building C



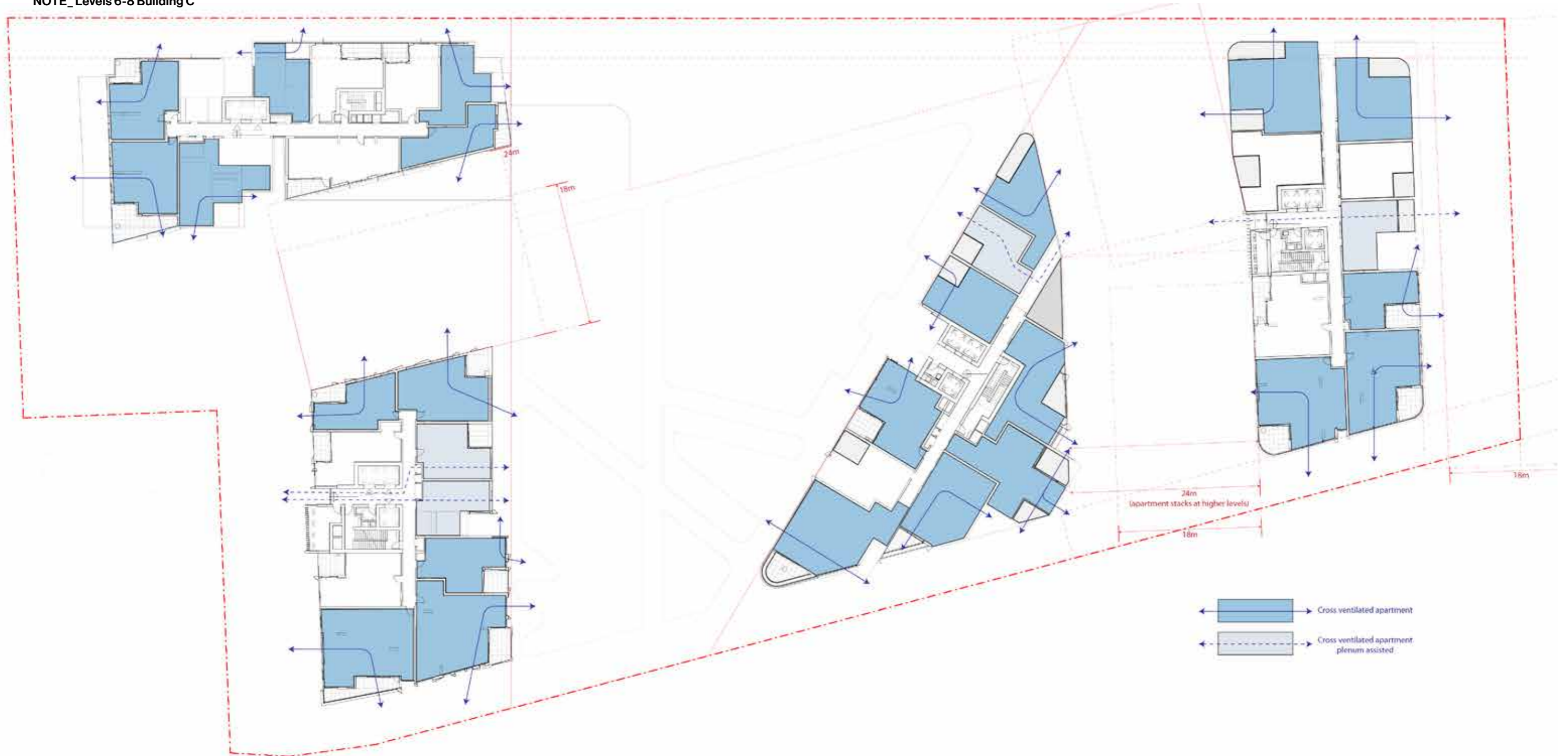
LEVEL 6

NOTE_Level 5 Building C



LEVEL 7-8

NOTE_Levels 6-8 Building C



SEPP65 DESIGN QUALITY PRINCIPLES

Schedule 1 Design quality principles

Principle 1: Context and neighbourhood character

Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions.

Responding to context involves identifying the desirable elements of an area's existing or future character. Well designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood.

Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change

Response

Arncliffe is located 11 km south of Sydney CBD. It is mostly a residential area with some commercial and light industrial development.

The site is located within 400m of Arncliffe Station and approximately 2km from Sydney Airport. The redevelopment of the site will provide access to homes, employment and amenity close to public transport.

It presents an opportunity for the significant renewal of the site to better meet the needs of the community.

- + Located in a mixed use corridor, there is potential for a mix of uses that can leverage off the proximity to public transport and a direct connection via the Arcade to the Train Station.
- + The site will unlock a compact, walkable and mixed use precinct that will activate the neighbourhood
- + Existing development on site comprises of 3 storey residential buildings
- + The site is surrounded by mixed-use, retail and residential developments within the immediate context.
- + It interfaces with the busy Princes Highway environment on the east and a quiet tree lined edge along Eden Street on the west.
- + Well connected to public transport, town centre and community uses.
- + Within 400m to Arncliffe Station and 2km to the Sydney Airport
- + Opportunity for Transit Oriented Development
- + Homes, jobs and public amenities close to public transport.
- + Compact walkable mixed-use precinct that activates the neighbourhood.
- + Well integrated within the existing and future evolving context of Arncliffe.

Principle 2: Built form and scale

Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings.

Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements.

Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.

Response

Building alignment and amenity

The proposed tower orientation and form has been designed through extensive testing to ensure compliance with solar access and maximise district views to Sydney Airport, Botany Bay and the CBD.

Built form and desired future context

The site plays a significant role in defining a distinctive identity for the Arncliffe Town Centre that aligns with and responds to the desired future character for the area. Taller buildings near the station visually reinforce the area as a centre and assist in highlighting the location of key connections and open spaces. The proposal locates height towards the northern end of the site achieving the 70m HOB that was envisaged within the LEP with a gradual decrease in height in the Southern Precinct.

Built form and separation

All residential buildings comply with Part 2F of the ADG regarding building separation requirements.

No screening has been used to achieve required separation, and in some instances building separation exceeds the requirements

Built form and public domain

Eden Street Park is a new local park catering to new residents with a centrally located lawn, gardens and significant tree planting. The tower massing has been carefully orientated to ensure maximum amenity to the new public park onsite.

Please refer to the section 'Context and Massing' of this report.

Principle 3: Density

Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context.

Appropriate densities are consistent with the area's existing or projected population. Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.

Response

The density of the development is deemed sustainable according to the existing availability of infrastructure, public transport, community facilities and environmental qualities of the site.

In accordance with SEPP65 ADG, apartment sizes, room sizes and apartment depths are all complying with at least the minimums set out in this guideline.

The proposal seeks to provide:

- + 744 residential units, including 180 social units.
- + 3,353sqm Retail
- + 240 sqm Childcare
- + 4,000sqm public open space and an additional 1800+sqm of public domain.

With in the permitted 64,513sqm of GFA permitted on the site.

Principle 4: Sustainability

Good design combines positive environmental, social and economic outcomes.

Good sustainable design includes use of natural cross ventilation and sunlight for the amenity and liveability of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and operation costs. Other elements include recycling and reuse of materials and waste, use of sustainable materials and deep soil zones for groundwater recharge and vegetation.

Response

A precinct wide approach has been adopted in our approach to sustainability. Integreco have issued a draft specification summary that includes preliminary score predictions for future materials selection. Initial testing has indicated the following metrics;

Water

- + 53/40 WATER for Buildings A, B & D
- + + 42/40 for Building C
- + Vegetated swales to protect water quality
- + On site detention to manage stormwater
- + Stormwater reuse for public domain irrigation

Energy

- + 30/20
- + Generous PV solar power for each building
- + LED lights throughout and various sensors (motion/daylight/timers)
- + Efficient mechanical and natural ventilation for units and common areas (BMS + sensors)

Passive

The facades of the towers have been studied in detail to respond to orientation and the provision of shading. The design has been developed of each tower to integrate the sun shading into the building language, in a way that promotes maximised residential amenity across aspects of comfort and view..

Shadowing has been shown for the low morning and late afternoon sun noting that the shading which typically has a depth of 600mm performs by blocking out the sun during the 12pm / 1pm time

SEPP65 DESIGN QUALITY PRINCIPLES

Schedule 1 Design quality principles

Principle 5: Landscape

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood.

Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, micro-climate, tree canopy, habitat values and preserving green networks.

Good landscape design optimises useability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity and provides for practical establishment and long term management.

Response

The landscape connects through the public domain, communal open spaces and the private domain of the terraces and balconies.

The public domain in the precinct includes the Eden Street Park, a series of civic spaces, through site link and streetscapes. The public domain caters for residents, local community as well as the wider community who move through and visit the precinct.

The variety of landscape spaces provide opportunities for informal recreation and play, connection to the outdoors and the natural environment as well as places for outdoor dining and social connection.

Public spaces

The Eden Street Park (4000m²) is the primary public park space which caters for the residential community as well as wider community and visitors to the site. A series of tree covered connected civic spaces run through and link the precinct to the surrounding streets. The planting has been carefully considered to provide a predominantly native palette for ecological value, site specific identity to the precinct.

Private spaces

Communal opens spaces are provided to each of the residential buildings to complement the amenity provided in the public spaces and private balconies and terraces.

The predominantly native plant palette continues into the private landscape domain to continue the genius loci through the precinct. Planting has been incorporate in some balconies and terraces to enhance the impact of 'green' to the façades of the building, extending the landscape through the built form.

Please refer to the section relating to ADG compliance of this report.

Principle 6: Amenity

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

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

Response

Resident and neighbours external amenity

In addition to the new public park, public domain and communal areas outlined in principle 5 the proposal seeks to provide a significant uplift the quality of public amenities including retail, community centre and site connectivity resulting in social and economic benefits to the community. Aligned with the RD-DCP, Eden Street is intended to extend the Town Centre from Arncliffe Station and create a pedestrian focussed retail and food destination. The proposals retail and laneways precinct with a focus on food and beverage offerings will significantly contribute to this aspiration. Further complimenting resident and neighbouring amenity will be a 240sqm childcare located on Eden Street southern edge of the public park.

Additional initiatives within the design include parking that is provided entirely within basement levels along with apartment storage cages, recycling and waste room. Residential parking access to site has been separated from retail parking. The parking and loading that is servicing the proposal that is required to be accessed from Eden Street has been designed to utilise a single consolidated crossover at the southern most end of the site, furthest away from the upgraded pedestrian links to the train station.

Resident internal amenity

The proposed design is configured to best achieve the requirements outlined under SEPP 65 and provides a high level of amenity to each apartment and each building which achieves individual compliance. The masterplan has been prepared to maximise solar access, cross ventilation, indoor and outdoor spaces, visual and acoustic privacy, efficient layouts and outlook to views. Balconies are designed to provide a usable outdoor space while maintaining privacy between units by limiting opportunities for overlooking.

Please refer to the section relating to ADG compliance of this report.

Principle 7: Safety

Good design optimises safety and security within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety.

A positive relationship between public and private spaces is achieved through clearly defined secure access points and well lit and visible areas that are easily maintained and appropriate to the location and purpose.

Response

The design of the safety and security of both the public and private spaces have been designed with safety in design principles foremost in mind.

Public spaces

- + Public spaces have been defined with clear boundaries that delineate them from those of private residential use
- + All areas of the public domain including the public park, through site link and Eden St and Princes Highway interfaces also benefit from substantial amounts of passive security afforded by the apartments that front them
- + the landscaping has also been carefully considered to ensure that there is an emphasis on tall canopy cover for sun protection and low level planting to avoid restricting site lines.
- + The basement carparking has been carefully designed to ensure that there is no pubic access to private basements areas.
- + The retail laneways have been organised to allow for secure points to be gated in after hours

Private spaces

- + All communal opens spaces are on raised terraces, inaccessible from the public domain with secure keyed access.
- + All communal areas will benefit from extensive passive surveillance with overlooking by typically two towers for each landscaped area
- + Each building has a clear building entrance that is located with clear visibility from Eden Street or Princess Highway and is distinctly separated from pubic areas and pedestrian thoroughfares.

Principle 8: Housing diversity and social interaction

Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.

Well designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix.

Good design involves practical and flexible features, including different types of communal spaces for a broad range of people and providing opportunities for social interaction among residents.

Response

The proposal features a wide variety of apartments types and areas to cater for a wide demographic that is currently present in the Arncliffe area as well as the anticipated future demands for the broader area. The proposed market apartment mix and areas are:

- + 223 1 bedroom apartments varying between 50sqm and 61sqm
- + 199 2 bedroom apartments varying between 75sqm and 90sqm
- + 142 3 bedroom apartments varying between 96sqm and 131sqm

In addition to this the proposal seeks to provide 180 Social housing dwellings, and increase from the 140 that currently exist on the site. The mix of these apartments has been developed in consultation with social housing providers to best meet existing and anticipated future demand and consists of:

- + 9 studios at 35sqm
- + 100 1 bedroom apartments varying between 50sqm and 53sqm
- + 63 2 bedroom apartments varying between 70sqm and 73sqm
- + 8 3 bedroom apartments at 90sqm

In addition to this mix the social housing has been designed with twin key options to provide further flexibility available to the social housing operators to meet future demands.

Opportunities for Interaction

The proposal also features several opportunities for social interaction at varying levels of private and public environments including shared communal terraces with access from multiple towers for both social and market use as well as public spaces including F+B focussed retail, public park areas and childcare facilities.

SEPP65 DESIGN QUALITY PRINCIPLES

Schedule 1 Design quality principles

Principle 9: Aesthetics

Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures.

The visual appearance of a well designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.

Response

The architectural vision for this development is to provide new high-quality dwellings with strong social and community connections which responds to both the current and future aspirations of the site and context.

Proportions and composition

The proportions and composition were originally formed from principles outlined in the development control plans that were outlined for the site. Once the objectives of these plans were met the concept was developed in consultation with the SDRP to ensure the best possible outcome for the amenity of the proposal.

Adjustments made to the DCP diagram included:

- + Reorientation of the podium on the northern edge of the new public park to respond to the key desire line set up by The Arcade. This improves the through site link connection to the Princes Highway
- + Creation of a Civic Plaza at a key location on Eden Street, supported by active edges by pushing the podium wall at B back from Eden Street
- + Increased setback at lower ground along Eden Street creates active edges to Civic Plaza
- + Increased setback adjacent to the northern link improves and increases visual connectivity as an extension of The Arcade
- + Variation of the street wall condition facilitates permeability through the site

Materials, colours and textures

The materials palette has been consolidated and its application more consistent across the whole development. Consistent detailing for material and facade elements provide a unified and cohesive design. Facades and context.

Through the SDRP process in collaboration with the Design Excellence Panel the materials palette has been simplified and the overall expression more unified. The design team and the panel have pushed the palette to self finished materials avoiding paint. Encouraging this concrete has been consistently applied as a material unifying all buildings across north and south precinct which has also been developed through multiple design workshops, providing a more unified expression and language of detailing.

Facades and context

The facade articulation has been developed to further respond to the orientation of the buildings within the architectural language of each building, and maintaining residential amenity where views are. The placement of buildings was considered at length

in the masterplan stage of the project, and part of the placement was consideration of solar access and orientation. Minimising facades facing west was a contributing factor.

Through numerous SDRP workshops, the facades have been developed to further respond to the areas raised in regards to solar screening, shading devices and expression.

Please refer to the section 'Tower Architecture' of this report.

OVERSHADOWING

The shadowing impact has been carefully considered as part of the masterplan studies and building placement in the earlier stages of the project.

The adjacent shadow studies demonstrate that the school located to the south of the site on Forest Road will not be negatively impacted by the proposal.

The hours tested are those which students will be using the open space, and the diagrams indicate that the shadows cast will not impact these times.

The shadow studies have also been undertaken (and submitted with the SSDA) that illustrate ADG compliance with future development in the adjacent sites including those on the other side of the Princes Hwy.

Future precinct development character and viability of the two sites directly to the south of the site have been studied in detail and are summarised on the following page.



21st June - 9am



21st June - 10am



21st June - 11am



21st June - 12pm



21st June - 1pm



21st June - 2pm



21st June - 3pm

ADJACENT DEVELOPMENT

As part of the development of the project we have also tested development capability to the new LEP for the surrounding sites, to ensure that they are capable of being developed with appropriate amenity.

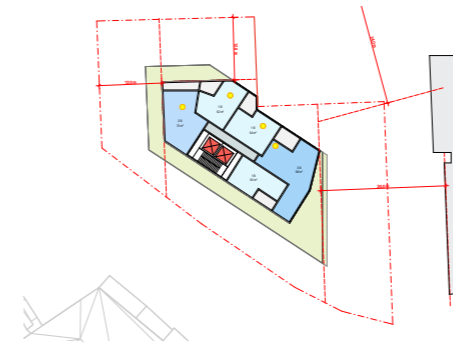
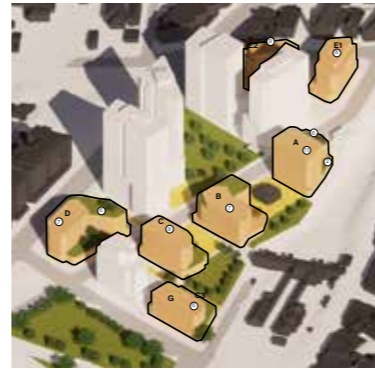
We undertook masterplan studies to test several aspects of future development. The entire precinct between Burrows St, Princes Hwy and Forest rd was tested for future character and potential public realm opportunities. This focussed on increased permeability to the station, improved pedestrian connections, and a sequence of pocket parks and an enhanced setting for the heritage items on Eden St.

Detailed testing of the sites directly to the south of our site were also undertaken, individually and as a grouped development, to validate individual development capability and compliance. Illustrated in the top middle and right images are the viability and compliance validation of the site fronting Forest Rd.

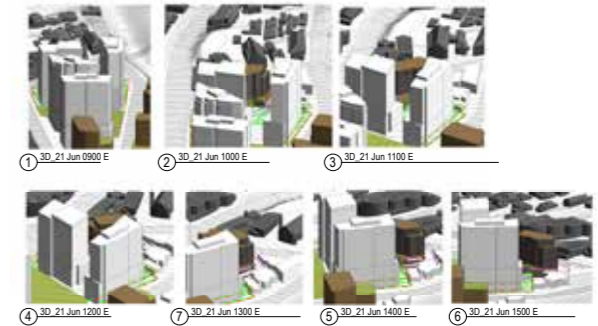
As the sites to the south have been on the market for a period of time, an attempt to engage in potential purchase discussions were undertaken but not successful.

3D VIEW

BLOCK	RETAIL (SQ APPROX)	APARTMENTS (NO APPROX)
A	2960m ²	84
B	1145 m ²	71
C	1724 m ²	48
D	1300 m ²	75
E	1930 m ²	90
G	2440	32



View from sun



* ALL DIMENSIONS, AREAL UNIT NUMBERS ARE INDICATIVE ONLY

Whole of precinct potential development study massing

Test individual site Forest Rd - ADG compliance

Test individual site Forest Rd - Eye of Sun + Solar compliance



PROPOSED MASTERPLAN

Whole of precinct potential development study

* ALL DIMENSIONS, AREAS, UNIT NUMBERS ARE INDICATIVE ONLY



EDEN STREET



1 GA - LVL 3 - 5
1: 250

KEY:
B: BALCONY
WG: WINTER GARDEN
POS: PRIVATE OPEN SPACE
SL: SKYLIGHT



DA SUBMISSION			
Plotted and checked by	PDS	Approved	LMC
Verified	PDS	Approved	LMC
Drawing Created (date)	Drawing Created (by) JK, SM, AR, EC, AF		
Scale	Project No	Drawing No	Issue
1: 250	180319	DA 2010	C

Amendments			Amendments		
Issue	Description	Date	Issue	Description	Date
-	ISSUED FOR INFORMATION	08/03/2021			
1	ISSUED FOR GANSW 03	24/03/2021			
2	ISSUED FOR INFORMATION	07/04/2021			
3	ISSUED FOR CONSULTANTS	16/04/2021			
4	ISSUED TO BASIX	28/04/2021			
5	ISSUED FOR CONSULTANTS	10/05/2021			
A	ISSUED FOR DA	28/05/2021			
B	ISSUED FOR REVIEW	05/06/2021			
C	ISSUED FOR DA	22/12/2021			

Arnccliffe Summary of Design Changes

Consultant
Structural Engineer / Civil
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 NSW 2060
TTW

Consultant
Mechanical / Acoustic / Fire Engineer
 Level 6, Building B, 207 Pacific Highway
 St Leonards NSW 2065
STANTEC

Consultant
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 architecture interior design urban design landscape
 nom architect Lisa-Maree Carrigan 7568

Project Title
Eden Street Arnccliffe

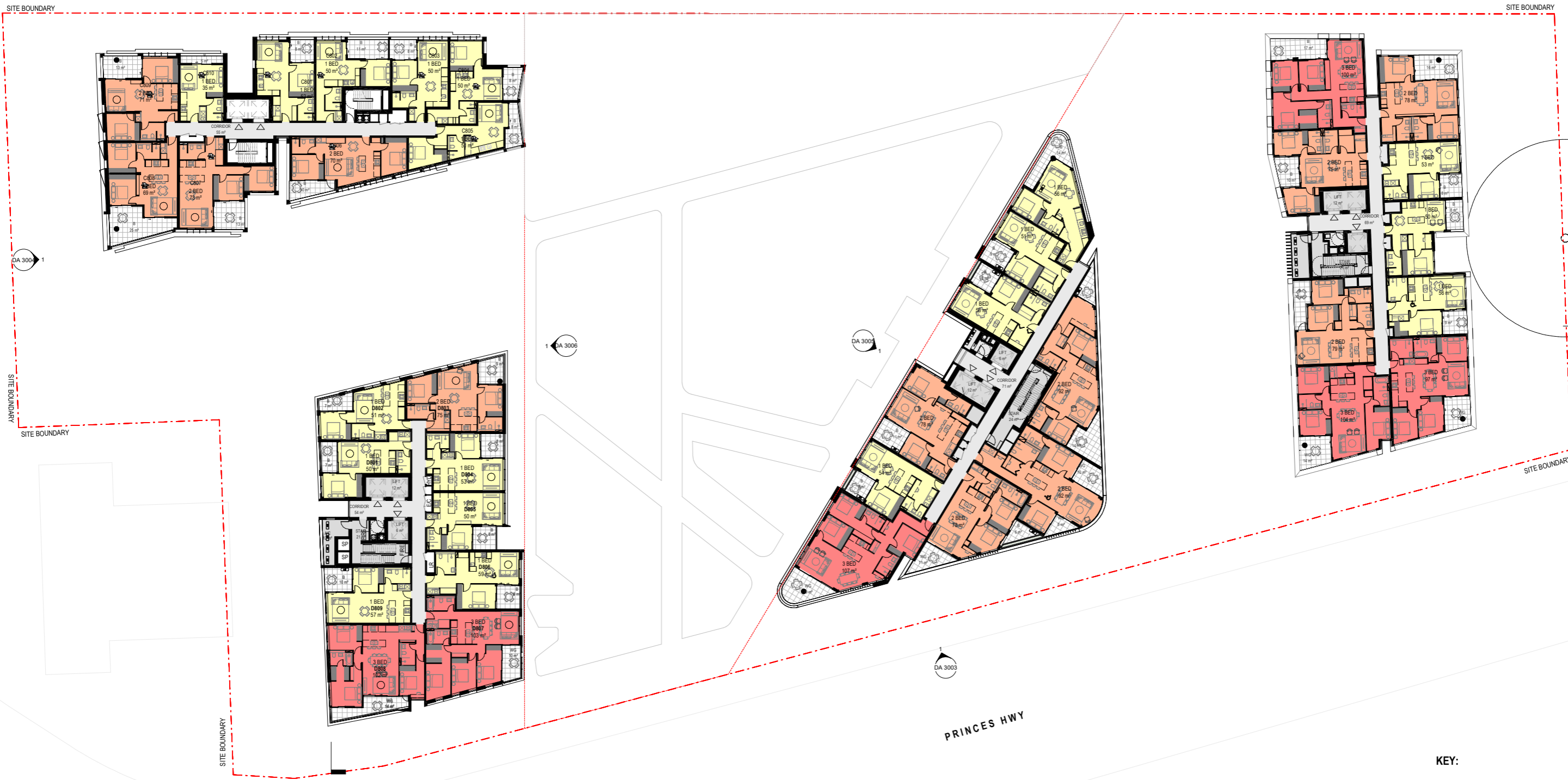
Drawing Title
LEVEL 5

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EDEN STREET

PRINCES HWY



1 LEVEL 8-14
1:250

KEY:

- B: BALCONY
- WG: WINTER GARDEN
- POS: PRIVATE OPEN SPACE
- SL: SKYLIGHT



DA SUBMISSION

Plotted and checked by	PDS		
Verified	PDS		
Approved	LMC		
Drawing Created (date)	22/10/2020		
Drawing Created (by)	JK, SM, AR, EC, AF		
Scale	Project No	Drawing No	Issue
1:250	180319	DA 2013	C

Issue	Description	Date
4	ISSUED FOR INFORMATION	17/11/2020
5	ISSUED FOR INFORMATION	01/12/2020
6	ISSUED FOR INFORMATION	08/03/2021
7	ISSUED FOR GANSW 03	24/03/2021
8	ISSUED FOR INFORMATION	07/04/2021
9	ISSUED FOR CONSULTANTS	16/04/2021
10	ISSUED TO BASIX	28/04/2021
11	ISSUED FOR CONSULTANTS	10/05/2021
A	ISSUED FOR DA	28/05/2021
B	ISSUED FOR REVIEW	08/11/2021
C	ISSUED FOR DA	22/12/2021

Issue	Description	Date
4	ISSUED FOR INFORMATION	17/11/2020
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Project Title
Eden Street Arncliffe

Drawing Title
LEVEL 8-12

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COUNTRY AND NARRATIVE

Through engagements with Bidjigal elders, Aunty Yvonne and Uncle Peter, some important principles were established as to how we should approach the design of this project:

Tell the story of Country

This is whale Country.

Implement Cultural land management practices

The design from masterplan principles through to detailed materials selection and expression has a narrative that is aligned with a "return to landscape and Country". Facilitated by WSP, the engagement of the Co-Design process has focussed on the following aspects :

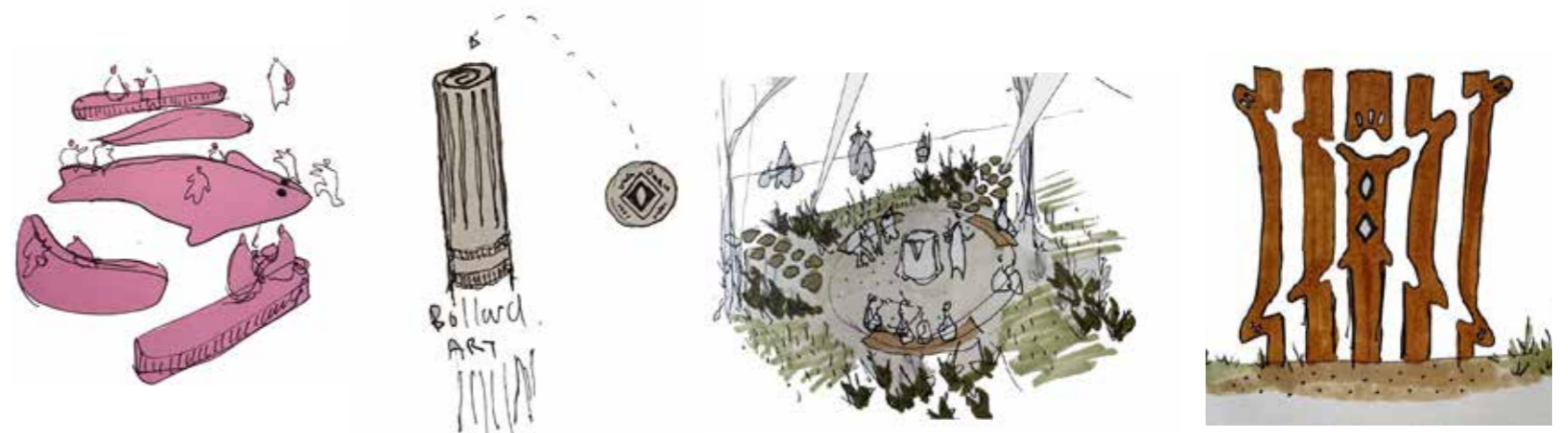
- Return to landscape principle for the site
- Cross contour site navigation and level restoration
- Landscape species selection supporting the endangered eastern banksia scrub
- Creating opportunities in public realm for meeting; yarning, ceremony, story telling and education
- Architecture materials self finished and natural
- Interpreting Country of ridge line, sky , rock and coast of Arncliffe and surrounds
- Wiari and Biari lore inspited in the form and selection of the northern precinct
- Eastern suburbs banksia inspired forms of the southern precinct
- Acknowledgment of Country, traditional naming and lore in the residential lobbies - reinforcing home in Country
- Meeting place, paving patterns and interpretation through public realm & Co-design
- Co-Design of public park and realm with play equipment inspired from the local flora
- Planting selection, placement (public realm and rooftop communal spaces) and ongoing custodianship by Indigigrow



WSP Aboriginal design Principles Report



Commissioned sketch by Richard Briggs of project concept



WSP Aboriginal design Principles Report Excerpt_Landscaping

ENGAGEMENT + CO-DESIGN

The design narrative for the project has evolved alongside our engagement process - to help understand the value of Country and ensuring that better built environment outcomes are informed and guided by Aboriginal knowledge and leadership.

We have had two engagement sessions with Auntie Yvonne Sims (Elder of the Bidjigal people) and two co-design sessions with Peter Cooley from Indigrow to ensure that our interpretations and embedding of Country into the design hold significant meaning and expression. This has allowed us to prioritise and think differently about Country, to establish a pathway and re-check and align with Aboriginal values as a way of connecting throughout the project lifecycle. It has also enabled us to refine our design and ensure the best outcomes for the project and the community it will serve.

Significant design development has been undertaken in the public realm to explore the relationship between Country and play.

The complex and dynamic relationships that characterise Country mean that making a connection with Country is not a task that will ever be completed, but rather an ongoing commitment to pay attention and to evolve our understanding, before, during and beyond the timeframe of a single project lifecycle.

Ongoing Involvement and Management

To ensure a meaningful and curated landscape into the future it is proposed to engage Indigrow for the design development, planting supply and future maintenance of the project for the key open space and communal spaces.

The scope of involvement for Indigrow is to:

- Work with the design team in co-design workshops to develop a unique indigenous palette that is site specific
- Grow plants for installation on the site.
- Be involved in the ongoing management and maintenance of the site to ensure that the native planting is curated and managed in the long term.



Peter Cooley, Indigrow



Co-design design with Peter Cooley, Indigrow



Engagement session with Auntie Yvonne Sims to discuss cultural awareness and the children's play area and productive garden



Site visit to Indigrow to meet Peter Cooley and learn about potential plant species for the open space

TOWER ARCHITECTURE

The overall architectural expression of the towers has been restrained and simplified to allow the primary form articulation to be clear.

The tower development has focussed on a unification and simplification of the forms, expression relating to plan, and consistent detailing of precast, spandrels, and sun-shading devices across buildings.

Materials Palette

- Consolidated materials palette
- Self finished materials avoiding paint
- Concrete as a consistent material in 2 finishes
- Neutral palette largely with minor accent materials on each building

Detailed Podium

- Focus in detail and fine grain within the podium architecture through form and rhythm
- Simplified details
- Focus on detail within public realm spaces and connections to built form

Tower Expression

- Towers have a clarified separation / recessive storey treatment to provide clarity from podium to tower
- Consistent 400 - 600mm solid upstands on all towers provide increased solidity to address orientation and % glass
- consistency of concrete palette with feature materials and shared detailing

Response to orientation / site

- Consistent language of vertical sun fins to east and west facades across all towers
- Consistent horizontals to northern aspects with consistent transition to vertical fins across towers
- Clear and articulated response to site specific orientation, aspect and climactic variants

View from park to north + west of D



View from park to east + north of C



View from Eden St to west + south of A + B



● Common materials

Bldg A materials palette



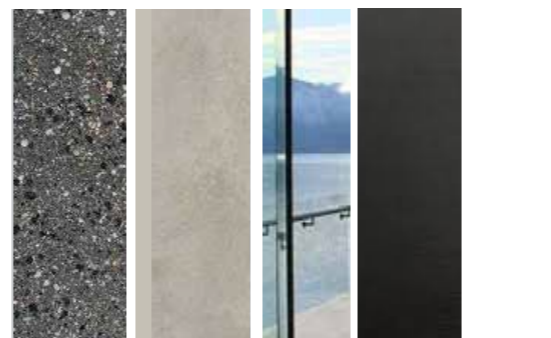
Bldg B materials palette



Bldg C materials palette



Bldg D materials palette



THE DEVELOPMENT IN CONTEXT: PRINCES HWY

The buildings massing is consistent with the LEP height and reflects the intensification of density and use anticipated under the controls, as part of a vibrant precinct with a public park at its centre, across from Arncliffe station.

This development marks one half of Arncliffe town centre and will provide a diverse, vibrant development with a return to landscape and country thematic which is embodied through the abundance of public realm spaces and landscape on every podium and rooftop.

view of Princes Hwy future context



View of Princes Hwy current context

THE DEVELOPMENT IN CONTEXT: EDEN ST

The buildings massing is consistent with the LEP height and reflects the intensification of density and use anticipated under the controls, as part of a vibrant precinct with a public park at its centre, across from Arncliffe station.

This development marks one half of Arncliffe town centre and will provide a diverse, vibrant development with a return to landscape and country thematic which is embodied through the abundance of public realm spaces and landscape on every podium and rooftop.

View of Eden St future context



View of Eden St current context

CURRENT CONTEXT VIEWS



View from north-eastern corner of site on princes hwy



View from south-eastern corner of site on princes hwy



View from north-western corner of site on Eden St



View from south-western corner of site on Eden St

FUTURE CONTEXT VIEWS



View from north-eastern corner of site on princes hwy



View from south-eastern corner of site on princes hwy



View from north-western corner of site on Eden St



View from south-western corner of site on Eden St

PRINCES HWY



EDEN STREET



BUILDING A

Building A has been developed with a higher % solidity, in line with the conceptual approach of fluid, Biari lore.

The building form has been developed into four separate forms hinged around the core, with a strong cut in the north and a slipped form east and west defining this. Solid upstands to the overall facade at 400mm above slab level, as well as more substantial areas of overall solid on the eastern and western facades are integral to an enhanced solidity and residential reading.

The zinc cladding that is in the podium has been added to the tower language as well as precast concrete, providing a stronger architectural palette connection and unified approach to podium and tower. There is a vertical emphasis in the tower which contrasts and provides distinction from the architecture of building B. An elegant play wvwhich loos like a twisting of materials occurs up the levels of the tower with the detaied balance between concrete and zinc in the solid panels.

Additional solidity has been added to the podium form to enhance the reading of the form and solidity %, and the use of perforated metal for balustrades has been extended to replace the glazed balustrades. The architectural fenestration has been simplified and its language made orthogonal to integrate it more cohesively into the other buildings

Materials palette



- Eastern facade : 58% solid
- Northern facade : 48% solid
- Western facade : 52% solid
- Southern facade : 46% solid
- Sun-shading to north with deep balconies
- Sun-shading to west with vertical fins
- Sun-shading to east with vertical fins

Building A revised form /plan :



princes hwy / east view of A



northern view of A

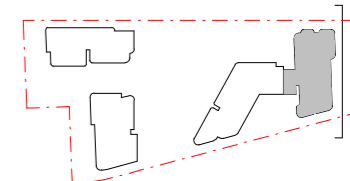
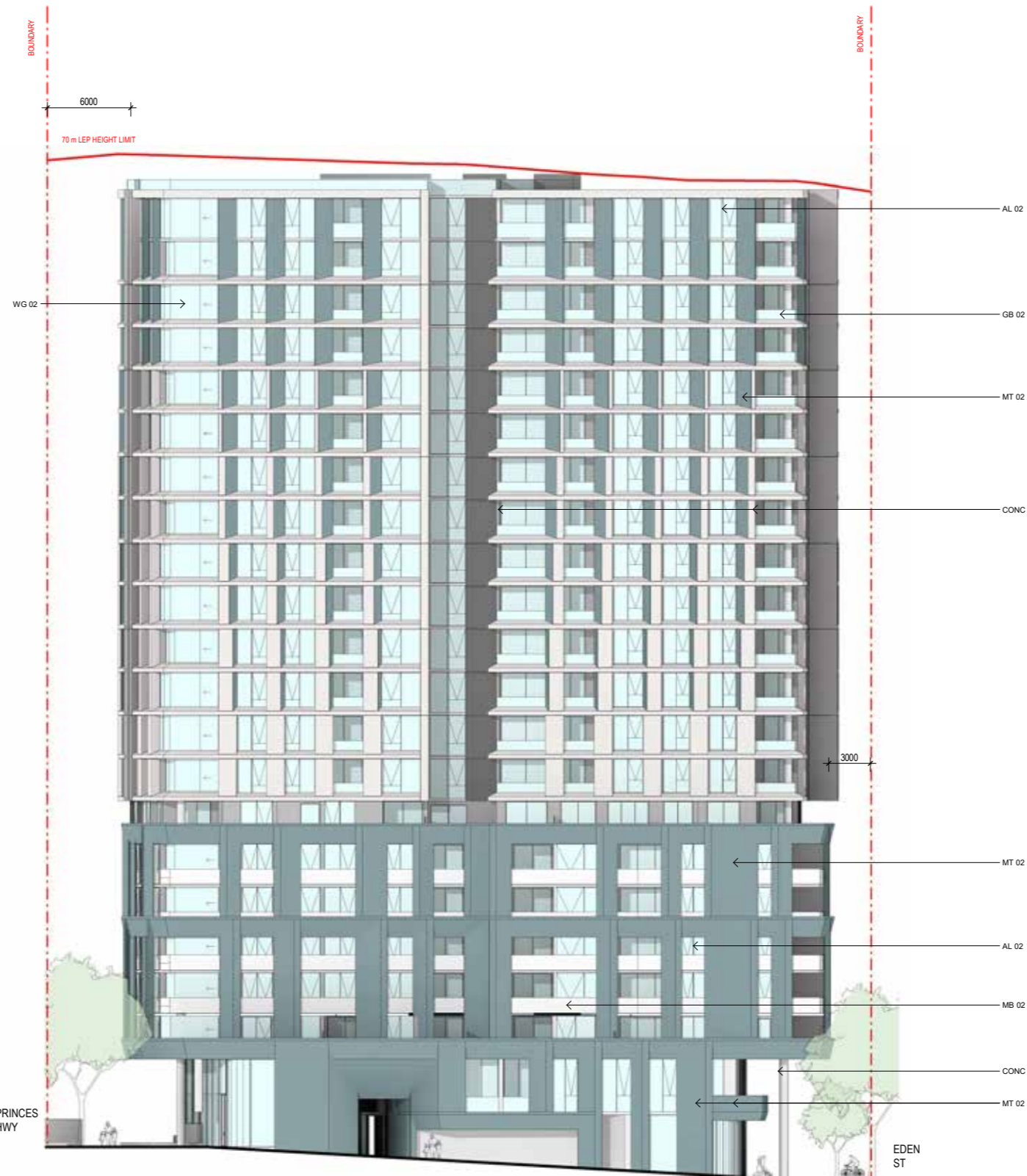
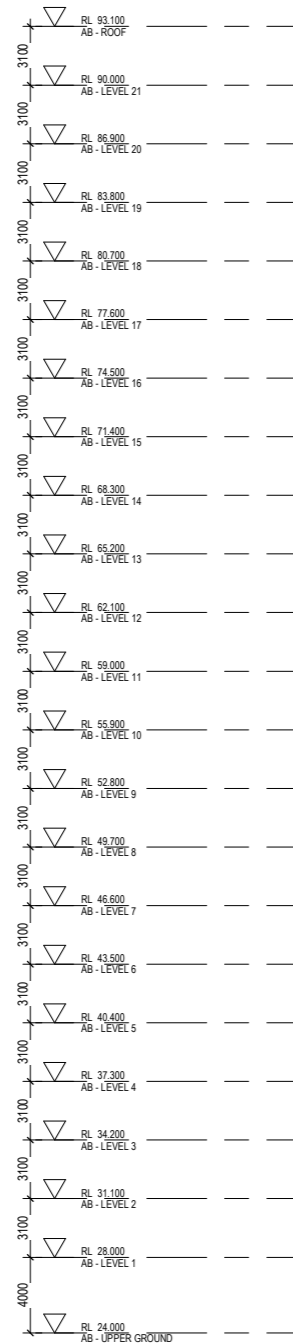


eden st / west view of A



southern view of A, B podium in section

NORTH



- METAL**
- MT 01 - METAL FACADE ELEMENTS SILVER/GREY TITANIUM
- MT 02 - METAL FACADE ELEMENTS AND CLADDING TEAL ZINC
- MT 03 - METAL FACADE ELEMENTS AND CLADDING BLACK
- MT 04 - FEATURE METAL TO ENTRANCES AND KIOSK BRUSHED ALUMINIUM/SIMILAR
- PT-01 - PREFINISHED PANEL / METAL PANEL, BRONZE LOOK
- CONCRETE**
- CONC 01 - PRECAST CONCRETE GLOSS FINISH
- CONC 02 - PRECAST CONCRETE WHITE
- CONC 03 - PRECAST CONCRETE BLACK
- CONC 04 - CONCRETE DARK FINISH
- CONC 05 - PROFILED PANEL, WITH DARK FINISH
- CONC 06 - PROFILED PANEL, WITH LIGHT FINISH
- BRICK**
- BR 01 - BRICK, NATURAL. STRETCHER BOND PATTERN
- BR 02 - BRICK, GLASS. STRETCHER BOND PATTERN
- SCREENS**
- SC 01 - PERFORATED SCREENS BRONZE/GOLD METAL
- SC 02 - VERTICAL BATTEN SCREEN TO MATCH MT01
- SC 03 - VERTICAL BATTEN SCREEN OFF WHITE
- SC 04 - VERTICAL BATTEN SCREEN TO MATCH MT03
- ALUMINIUM FRAMED GLAZING AND BALUSTRADES**
- GB 01 - GLASS BALUSTRADE WITH GREY GLASS
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- GB 03 - BRONZE GLASS
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- AL 01 - ALUMINIUM FRAMED WINDOW GREY GLASS
- AL 02 - CLEAR GLASS
- AL 03 - BRONZE GLASS
- WG 01 - WINTERGARDEN GREY GLASS
- WG 02 - CLEAR GLASS
- MB 01 - METAL BALUSTRADE TEAL ZINC COLOUR
- MB 02 - METAL BALUSTRADE PERFORATED METAL
- MB 03 - METAL BALUSTRADE PALISADE

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 creating communities

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 nom architect Lisa-Maree Carrigan 7568

Project Title
 Eden Street Arncliffe

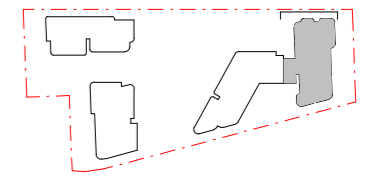
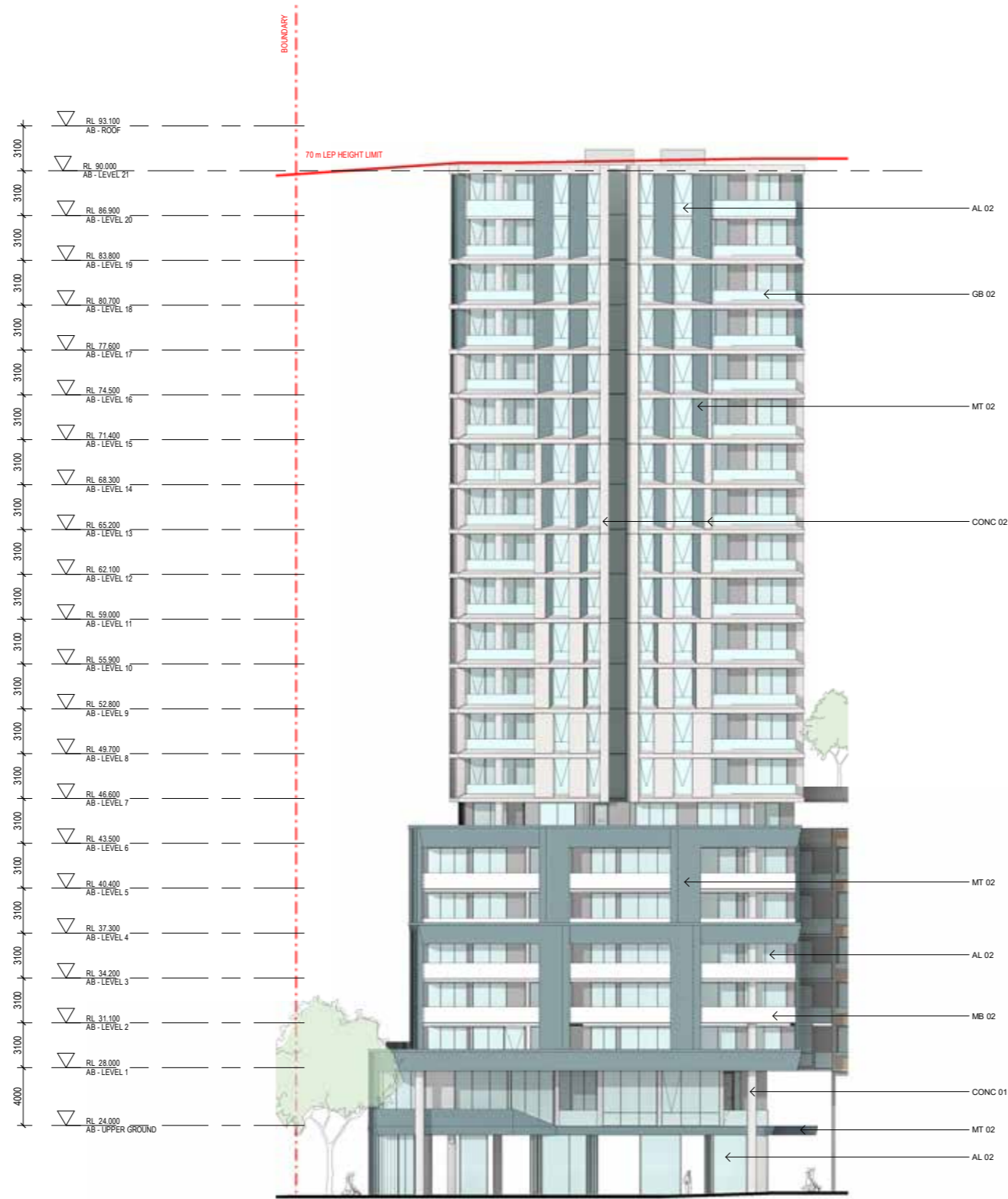
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 TOWER A - NORTH EAST
 ELEVATION

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WEST



- METAL**
- MT 01 - METAL FACADE ELEMENTS SILVER/GREY TITANIUM
- MT 02 - METAL FACADE ELEMENTS AND CLADDING TEAL ZINC
- MT 03 - METAL FACADE ELEMENTS AND CLADDING BLACK
- MT 04 - FEATURE METAL TO ENTRANCES AND KIOSK BRUSHED ALUMINUM/SIMILAR
- PT-01 - PREFINISHED PANEL / METAL PANEL, BRONZE LOOK
- CONCRETE**
- CONC 01 - PRECAST CONCRETE GLOSS FINISH
- CONC 02 - PRECAST CONCRETE WHITE
- CONC 03 - PRECAST CONCRETE BLACK
- CONC 04 - CONCRETE DARK FINISH
- CONC 05 - PROFILED PANEL, WITH DARK FINISH
- CONC 06 - PROFILED PANEL, WITH LIGHT FINISH
- BRICK**
- BR 01 - BRICK, NATURAL. STRETCHER BOND PATTERN
- BR 02 - BRICK, GLASS. STRETCHER BOND PATTERN
- SCREENS**
- SC 01 - PERFORATED SCREENS BRONZE/GOLD METAL
- SC 02 - VERTICAL BATTEN SCREEN TO MATCH MT01
- SC 03 - VERTICAL BATTEN SCREEN OFF WHITE
- SC 04 - VERTICAL BATTEN SCREEN TO MATCH MT03
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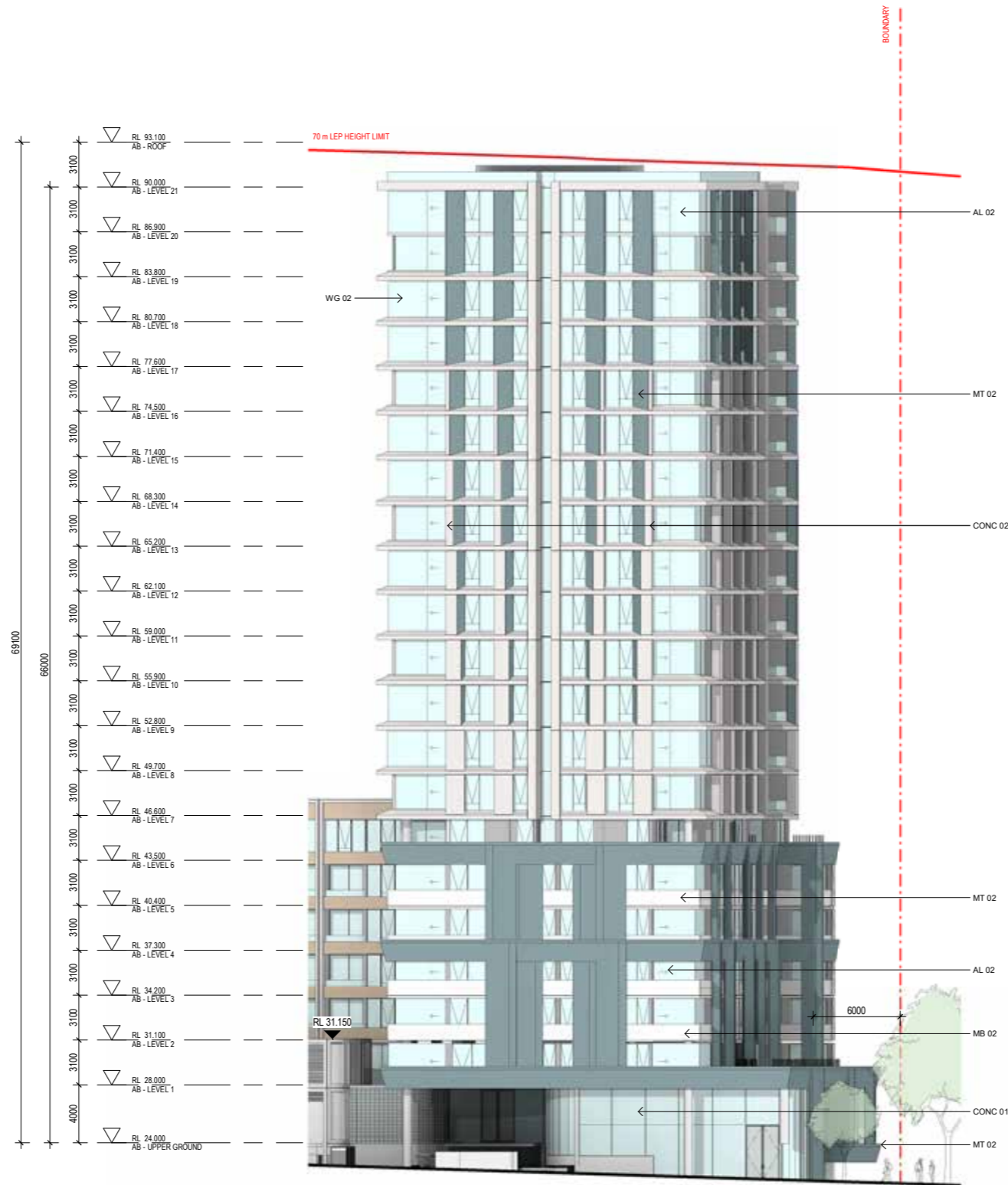
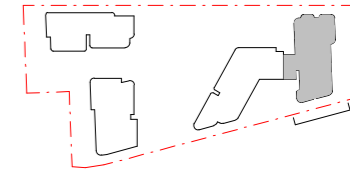
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EAST



- METAL**
- MT 01 - METAL FACADE ELEMENTS SILVER/GREY TITANIUM
 - MT 02 - METAL FACADE ELEMENTS AND CLADDING TEAL ZINC
 - MT 03 - METAL FACADE ELEMENTS AND CLADDING BLACK
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- SCREENS**
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 - WG 01 - WINTERGARDEN GREY GLASS
 - WG 02 - CLEAR GLASS
 - MB 01 - METAL BALUSTRADE TEAL ZINC COLOUR
 - MB 02 - METAL BALUSTRADE PERFORATED METAL
 - MB 03 - METAL BALUSTRADE PALISADE

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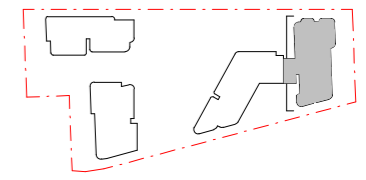
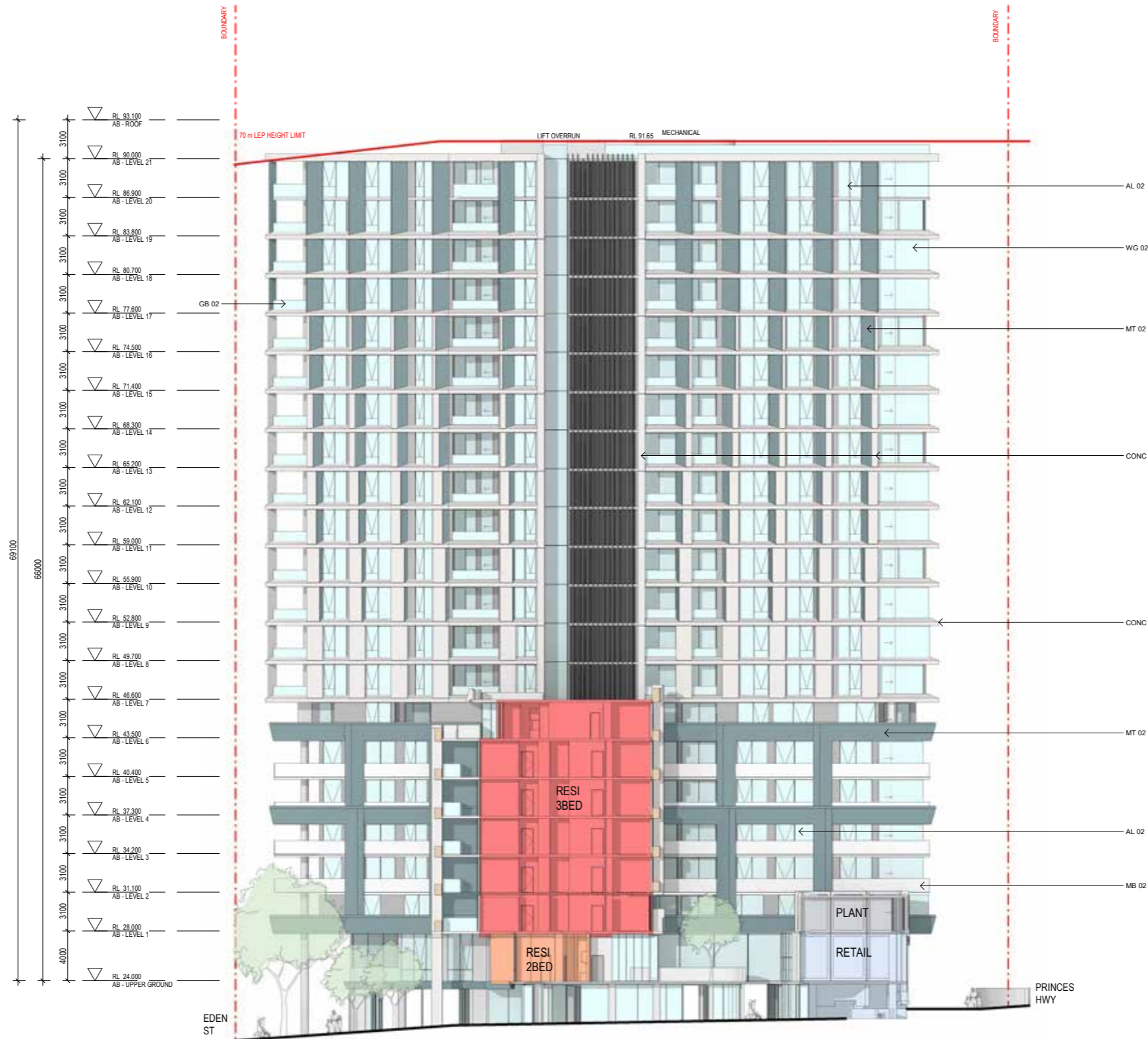
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 TOWER A - SOUTH EAST
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SOUTH



- METAL**
- MT 01 - METAL FACADE ELEMENTS SILVER/GREY TITANIUM
 - MT 02 - METAL FACADE ELEMENTS AND CLADDING TEAL ZINC
 - MT 03 - METAL FACADE ELEMENTS AND CLADDING BLACK
 - MT 04 - FEATURE METAL TO ENTRANCES AND KIOSK BRUSHED ALUMINUM/SIMILAR
 - PT-01 - PREFINISHED PANEL / METAL PANEL, BRONZE LOOK
- CONCRETE**
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- BRICK**
- BR 01 - BRICK, NATURAL. STRETCHER BOND PATTERN
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- SCREENS**
- SC 01 - PERFORATED SCREENS BRONZE/GOLD METAL
 - SC 02 - VERTICAL BATTEN SCREEN TO MATCH MT01
 - SC 03 - VERTICAL BATTEN SCREEN OFF WHITE
 - SC 04 - VERTICAL BATTEN SCREEN TO MATCH MT03
- ALUMINIUM FRAMED GLAZING AND BALUSTRADES**
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BUILDING B

Building B has been developed with a higher % solidity, in line with the conceptual approach of relating to Wiari lore, and bringing Country up the tower.

The tower form has been developed with stronger recesses and more unified form which smooths out the previously stepped form to provide a stronger and cleaner architecture. Solid upstands to the overall facade at 600mm above slab level, as well as more substantial areas of overall solid on the eastern and western facades are integral to an enhanced solidity and residential reading. Acid etched precast concrete and landscape planters are the majority of the palette.

The form of B has become more fluid, with full vertical sections the height of the tower now on all facades that feature landscape planters on every balcony, and provide enhanced relationship with the podium expression with its more prevalent planters.

Fine vertical fins on the eastern facade provide shading, and are delicate in expression, allowing the strong horizontality of the individual floor expression to dominate.

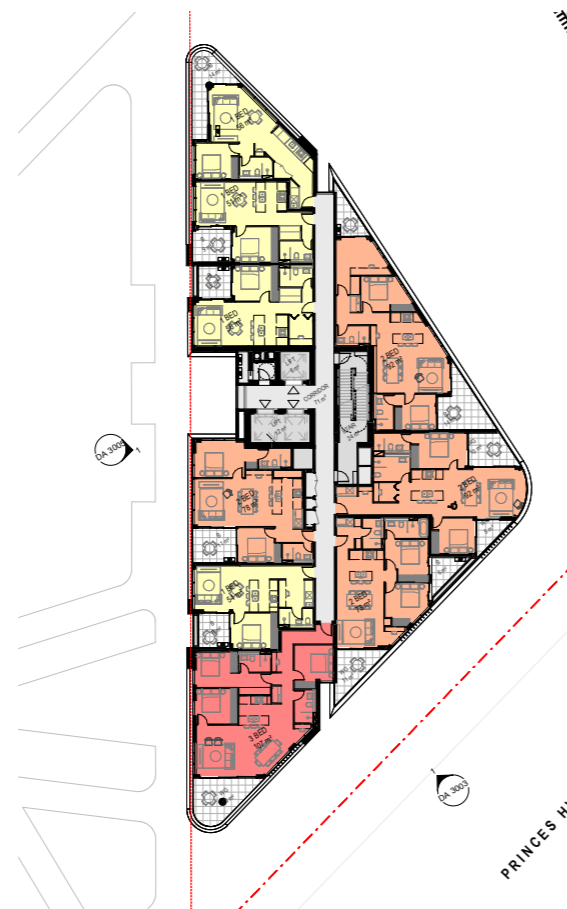
Materials Palette



The podium architecture has been simplified and unified, and the stronger form of the podium further enhanced via a recessive storey to the tower.

- Eastern facade : 50% solid
- Northern facade : 63% solid
- Western facade : 52% solid
- Southern facade : 45% solid
- Sun-shading to north with sun hoods
- Sun-shading to west with deep balconies
- Sun-shading to east with vertical fins

Building B revised form /plan :



princes hwy view / east of B



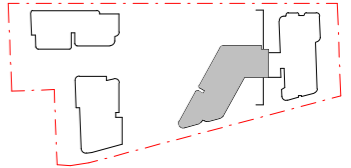
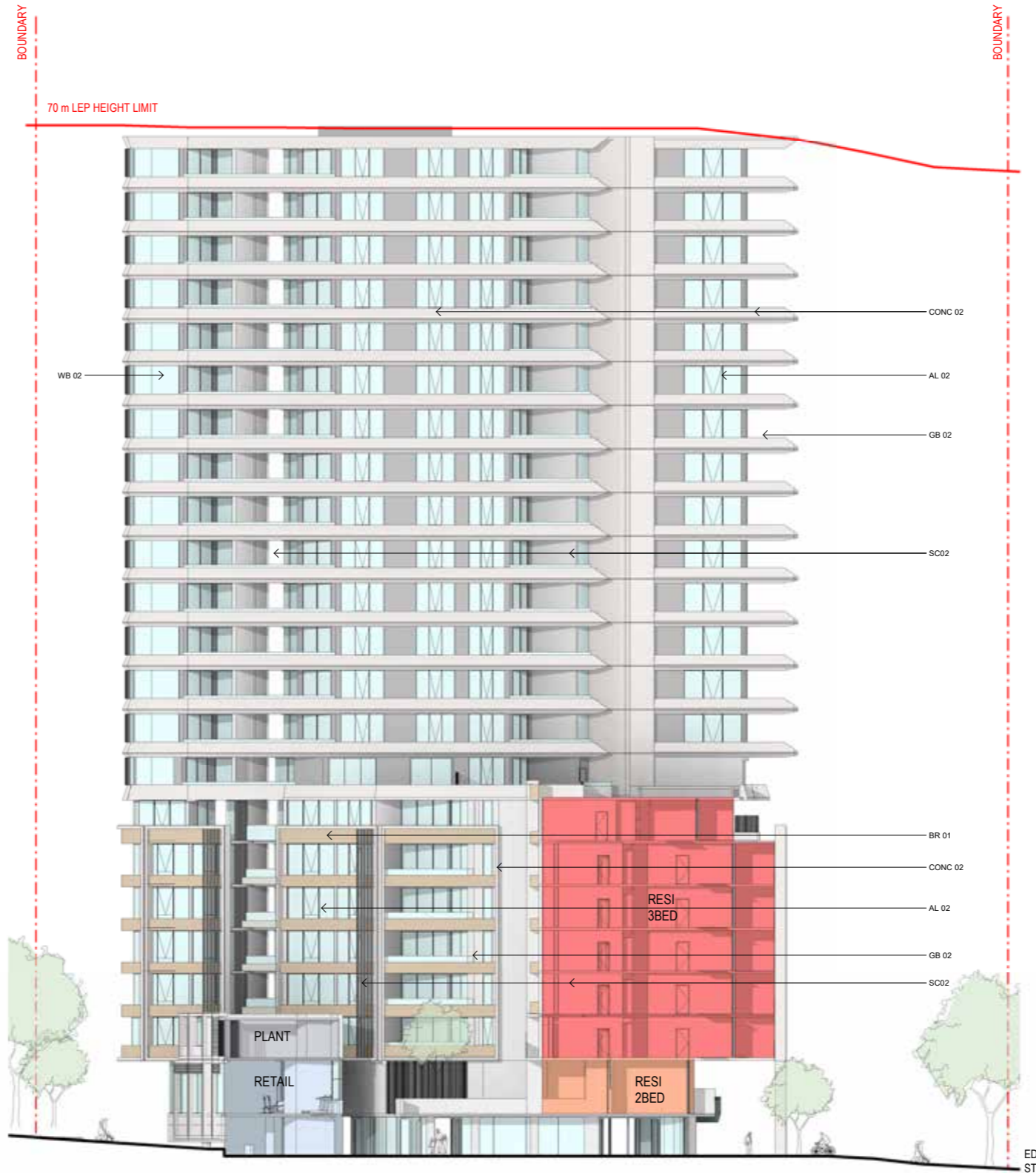
elevated view from meeting place to west of B



princes hwy view heading south from city- / north of B

NORTH

RL 93.100	AB - ROOF
RL 90.000	AB - LEVEL 21
RL 86.900	AB - LEVEL 20
RL 83.800	AB - LEVEL 19
RL 80.700	AB - LEVEL 18
RL 77.600	AB - LEVEL 17
RL 74.500	AB - LEVEL 16
RL 71.400	AB - LEVEL 15
RL 68.300	AB - LEVEL 14
RL 65.200	AB - LEVEL 13
RL 62.100	AB - LEVEL 12
RL 59.000	AB - LEVEL 11
RL 55.900	AB - LEVEL 10
RL 52.800	AB - LEVEL 9
RL 49.700	AB - LEVEL 8
RL 46.600	AB - LEVEL 7
RL 43.500	AB - LEVEL 6
RL 40.400	AB - LEVEL 5
RL 37.300	AB - LEVEL 4
RL 34.200	AB - LEVEL 3
RL 31.100	AB - LEVEL 2
RL 28.000	AB - LEVEL 1
RL 24.000	AB - UPPER GROUND



- METAL**
- MT 01 - METAL FACADE ELEMENTS SILVER/GREY TITANIUM
- MT 02 - METAL FACADE ELEMENTS AND CLADDING TEAL ZINC
- MT 03 - METAL FACADE ELEMENTS AND CLADDING BLACK
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Project Title
 Eden Street Arncliffe

Drawing Title
 TOWER B - NORTH EAST
 ELEVATION

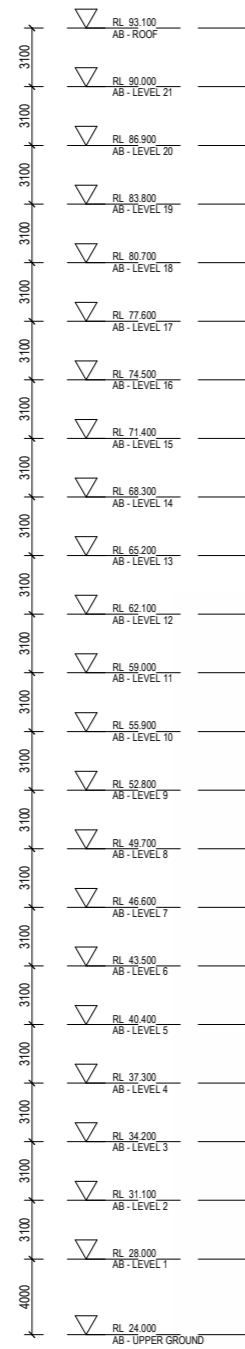
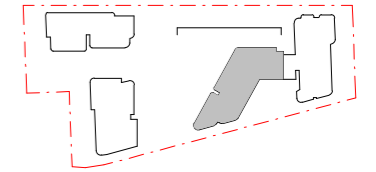
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As indicated	180319	DA 3020	C

Arncliffe Summary of Design changes

4/20/2022 9:28:50 PM

WEST



- METAL**
- MT 01 - METAL FACADE ELEMENTS SILVER/GREY TITANIUM
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Arncliffe Summary of Design changes

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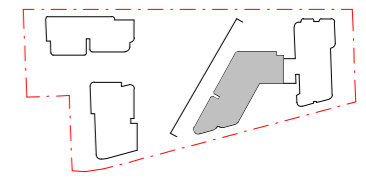
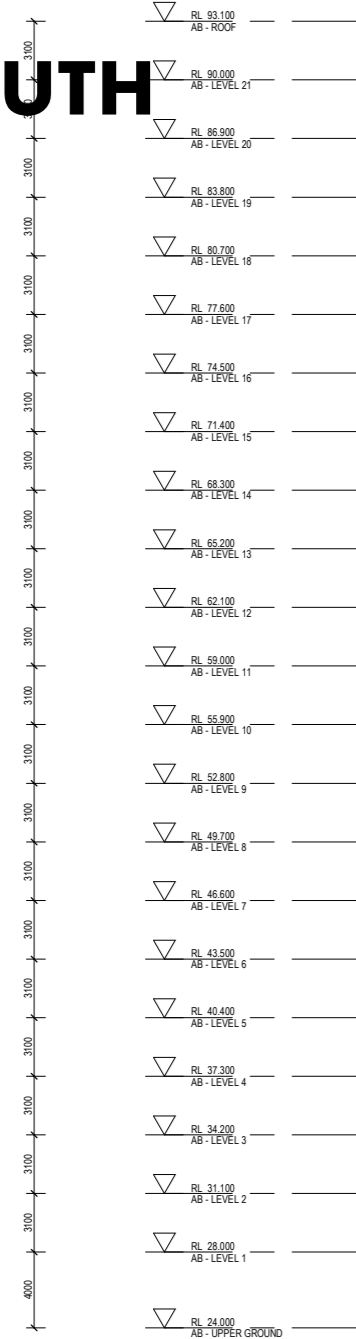
Drawing Title
**TOWER B - NORTH WEST
 ELEVATION**

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SOUTH



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Project Title
 Eden Street Arncliffe

Drawing Title
 TOWER B - WEST ELEVATION

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				LMC
Drawing Created (date)	Drawing Created (by)	J.K. SM. AR. EC. AF		
				20/12/21
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Arncliffe Summary of Design changes

4/10/2022 6:35:34 PM

BUILDING C

Building C has been developed with a higher % solidity, in line with the conceptual approach of relating to the banksia ericifolia in the expression and colour of sun-shading.

Solid upstands to the overall facade at 600mm above slab level, as well as more substantial areas of overall solid on the eastern and western facades are integral to an enhanced solidity and residential reading.

The form of C has become more articulated, with a stronger massing separation on the eastern and western faces, and the northern end has narrowed. The southern end has been developed with angled articulation of pop outs to provide more shadow play and interest on this facade.

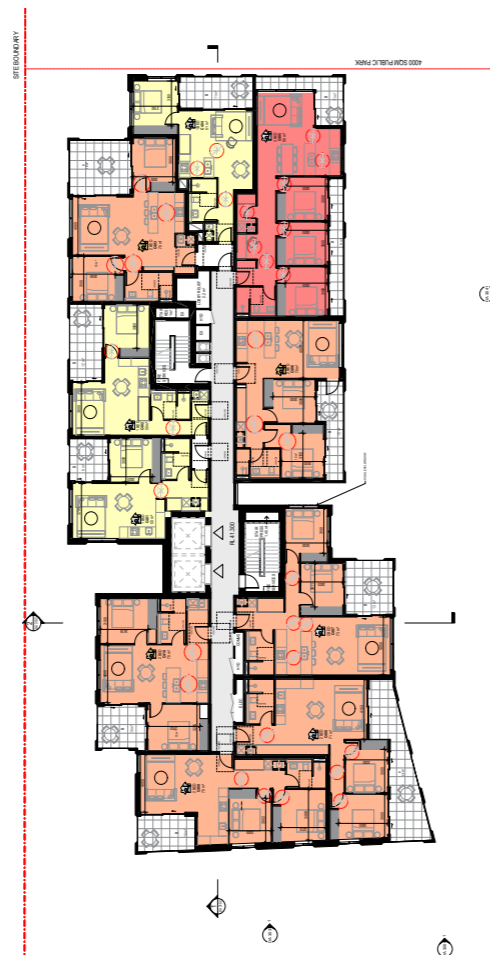
The sunshading on the eastern and western facades are the bronze perforated metal, which have been increased in density to provide enhanced shading and detail, and tie in with the detail of the podium. The tonal palette of the tower has been unified and patterned pre-cast put into infill panels for detail in the next phase.

Materials Palette



- Eastern facade : 57% solid
- Northern facade : 55% solid
- Western facade : 53% solid
- Southern facade : 83% solid
- Sun-shading to north with deep balconies
- Sun-shading to west with vertical fins
- Sun-shading to east with vertical fins

Building C revised form /plan:



elevated view from park / north of C



eden st / west view of C

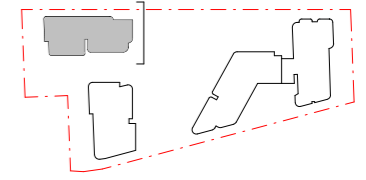


southern view of C



view from Building D to east of C

NORTH



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architecture interior design urban design landscape
nom architect Lisa-Maree Carrigan 7568

Project Title

Eden Street Arncliffe

Drawing Title

**TOWER C - NORTH EAST
ELEVATION**

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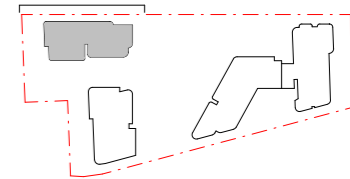
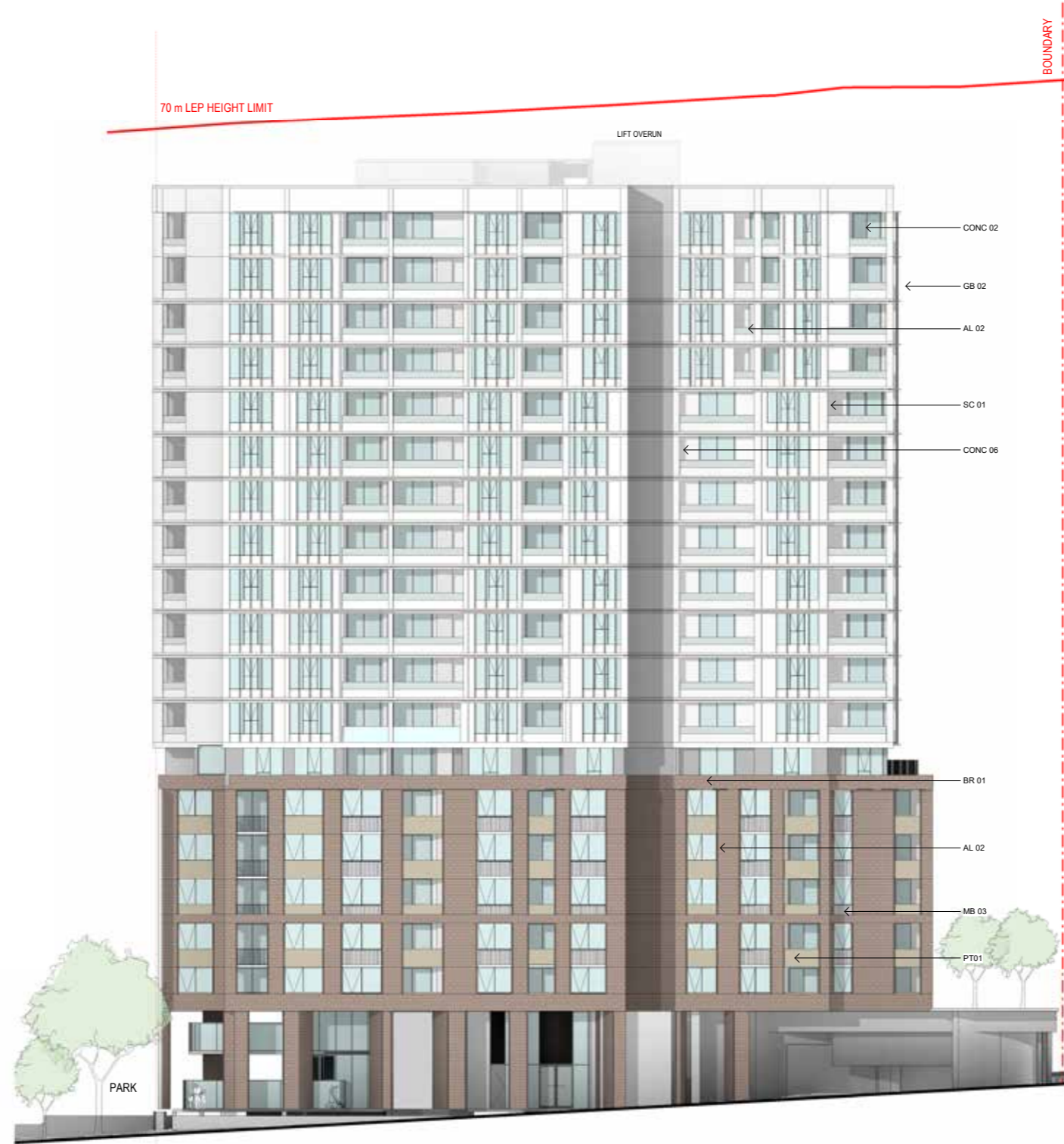
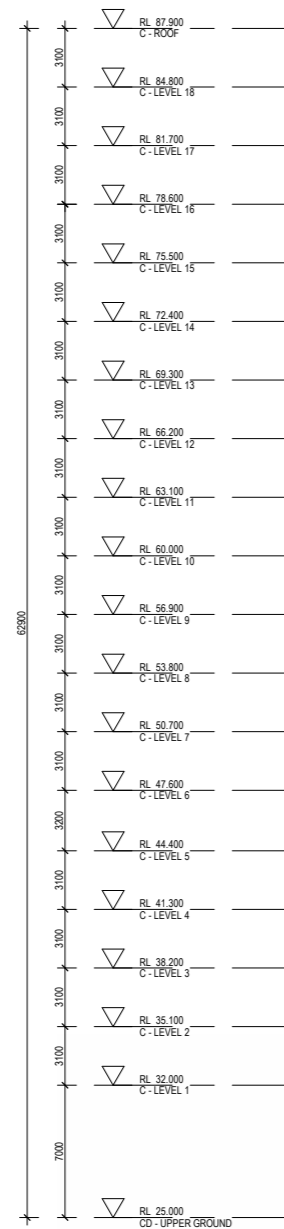
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Verified	PDS		
Approved	LMC		
Drawing Created (date)	Drawing Created (by) JK, SM, AR, EC, AF		
	20/12/21		
Scale	Project No	Drawing No	Issue
As indicated	180319	DA 3030	D

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WEST



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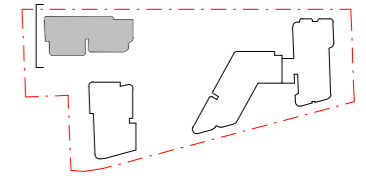
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Scale	Project No	Drawing No	Issue	
As indicated	180319	DA 3031	D	

Arncliffe Summary of Design changes

10/2022 1:13 PM

SOUTH



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 - MB 01 - METAL BALUSTRADE TEAL ZINC COLOUR
 - MB 02 - METAL BALUSTRADE PERFORATED METAL
 - MB 03 - METAL BALUSTRADE PALISADE

Issue	Description	Date
1	ISSUED FOR INFORMATION	19/03/2021
2	ISSUED FOR INFORMATION	30/03/2021
3	ISSUED TO BASIX	28/04/2021
4	ISSUED FOR CONSULTANTS	10/05/2021
A	ISSUED FOR DA	28/05/2021
B	ISSUED FOR DA	01/07/2021
C	ISSUED FOR REVIEW	08/11/2021
D	ISSUED FOR DA	22/12/2021

Issue	Description	Date

Consultant

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 NSW 2060
TTW

Mechanical / Acoustic / Fire Engineer
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 St Leonards NSW 2065
STANTEC

Hydraulics
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 NSW 2060
JHA

Client

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 Meadowbank, NSW, 2114

Billbergia
 creating communities

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 architecture interior design urban design landscape
 nom architect Lisa-Maree Carrigan 7568

Project Title

Eden Street Arncliffe

Drawing Title

TOWER C - SOUTH WEST ELEVATION

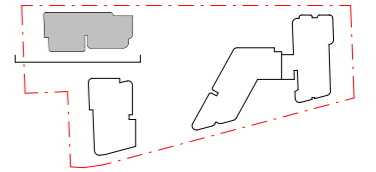
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Plotted and checked by	PDS	Approved	LMC	
Verified	PDS	Approved	LMC	
Drawing Created (date)		Drawing Created (by)	JK, SM, AR, EC, AF	20/12/21
Scale	Project No	Drawing No	Issue	
As indicated	180319	DA 3033	D	

Arncliffe Summary of Design changes

11/20/2022 9:10:25 AM

EAST



- METAL**
- MT 01 - METAL FACADE ELEMENTS SILVER/GREY TITANIUM
- MT 02 - METAL FACADE ELEMENTS AND CLADDING TEAL ZINC
- MT 03 - METAL FACADE ELEMENTS AND CLADDING BLACK
- MT 04 - FEATURE METAL TO ENTRANCES AND KIOSK BRUSHED ALUMINUM/SIMILAR
- PT-01 - PREFINISHED PANEL / METAL PANEL, BRONZE LOOK
- CONCRETE**
- CONC 01 - PRECAST CONCRETE GLOSS FINISH
- CONC 02 - PRECAST CONCRETE WHITE
- CONC 03 - PRECAST CONCRETE BLACK
- CONC 04 - CONCRETE DARK FINISH
- CONC 05 - PROFILED PANEL, WITH DARK FINISH
- CONC 06 - PROFILED PANEL, WITH LIGHT FINISH
- BRICK**
- BR 01 - BRICK, NATURAL. STRETCHER BOND PATTERN
- BR 02 - BRICK, GLASS. STRETCHER BOND PATTERN
- SCREENS**
- SC 01 - PERFORATED SCREENS BRONZE/GOLD METAL
- SC 02 - VERTICAL BATTEN SCREEN TO MATCH MT01
- SC 03 - VERTICAL BATTEN SCREEN OFF WHITE
- SC 04 - VERTICAL BATTEN SCREEN TO MATCH MT03
- ALUMINIUM FRAMED GLAZING AND BALUSTRADES**
- GB 01 - GLASS BALUSTRADE WITH GREY GLASS
- GB 02 - CLEAR GLASS
- GB 03 - BRONZE GLASS
- GB 04 - GLASS BALUSTRADE WITH FRITTED GLASS
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Arncliffe Summary of Design changes

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 nom architect Lisa-Maree Carrigan 7568

Project Title
Eden Street Arncliffe

Drawing Title
**TOWER C - SOUTH EAST
 ELEVATION**

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Scale	Project No	Drawing No	Issue	
As indicated	180319	DA 3032	D	

10/12/2021 1:20:31 PM

BUILDING D

Building D has been developed with a higher % solidity, in line with the conceptual approach of relating to the banksia husk in the expression of the podium and materials palette.

The architectural expression has been unified with a horizontal expression, which further unifies all of the towers. The building is broken down into three volumes, with the volume at the entry to the park at the princes hwy expressed as grounded, rather than the rest of the architecture which has the podium, recessive storey and tower above. this provides a gateway element to the cross site access and park, leading on to the station.

Solid upstands to at 600mm above slab level have been introduced to all facades providing consistency of solidity and expression. Vertical fins are added to the eastern and western facades, and horizontal elements to the north, to provide sun-shading. The crown of the building has been strengthened and simplified. The infills on the tower facades feature profiled precast to provide detail and shadowplay.

Materials Palette



- Eastern facade : 52% solid
- Northern facade : 47% solid
- Western facade : 52% solid
- Southern facade : 56% solid
- Sun-shading to north with sun hoods
- Sun-shading to west with vertical fins
- Sun-shading to east with vertical fins

Building D revised form /plan :



princes hwy / east view of D



view from park / north of D



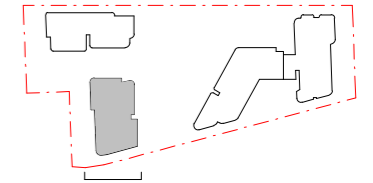
view from C of west of D



southern view of D

EAST

70 m LEP HEIGHT LIMIT



- METAL**
- MT 01 - METAL FACADE ELEMENTS SILVER/GREY TITANIUM
 - MT 02 - METAL FACADE ELEMENTS AND CLADDING TEAL ZINC
 - MT 03 - METAL FACADE ELEMENTS AND CLADDING BLACK
 - MT 04 - FEATURE METAL TO ENTRANCES AND KIOSK BRUSHED ALUMINUM/SIMILAR
 - PT-01 - PREFINISHED PANEL / METAL PANEL, BRONZE LOOK
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 - CONC 06 - PROFILED PANEL, WITH LIGHT FINISH
- BRICK**
- BR 01 - BRICK, NATURAL. STRETCHER BOND PATTERN
 - BR 02 - BRICK, GLASS. STRETCHER BOND PATTERN
- SCREENS**
- SC 01 - PERFORATED SCREENS BRONZE/GOLD METAL
 - SC 02 - VERTICAL BATTEN SCREEN TO MATCH MT01
 - SC 03 - VERTICAL BATTEN SCREEN OFF WHITE
 - SC 04 - VERTICAL BATTEN SCREEN TO MATCH MT03
- ALUMINIUM FRAMED GLAZING AND BALUSTRADES**
- GB 01 - GLASS BALUSTRADE WITH GREY GLASS
 - GB 02 - CLEAR GLASS
 - GB 03 - BRONZE GLASS
 - GB 04 - GLASS BALUSTRADE WITH FRITTED GLASS
 - AL 01 - ALUMINIUM FRAMED WINDOW GREY GLASS
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 - WG 02 - CLEAR GLASS
 - MB 01 - METAL BALUSTRADE TEAL ZINC COLOUR
 - MB 02 - METAL BALUSTRADE PERFORATED METAL
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Arncliffe Summary of Design changes

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 architecture interior design urban design landscape
 nom architect Lisa-Maree Carrigan 7568

Project Title
Eden Street Arncliffe

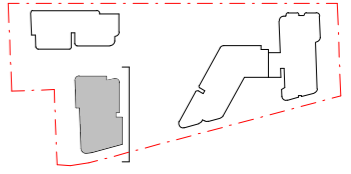
Drawing Title
**TOWER D - SOUTH EAST
 ELEVATION**

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Verified	PDS	Approved	LMC
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			20/12/21
Scale	Project No	Drawing No	Issue
As indicated	180319	DA 3042	D

4/10/2022 9:42:00 PM

NORTH



- METAL**
- MT 01 - METAL FACADE ELEMENTS SILVER/GREY TITANIUM
 - MT 02 - METAL FACADE ELEMENTS AND CLADDING TEAL ZINC
 - MT 03 - METAL FACADE ELEMENTS AND CLADDING BLACK
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 Consultant
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 Consultant
STANTEC

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 NSW 2060
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 architecture interior design urban design landscape
 nom architect Lisa-Maree Carrigan 7568

Project Title
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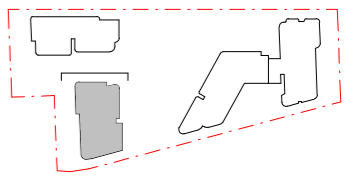
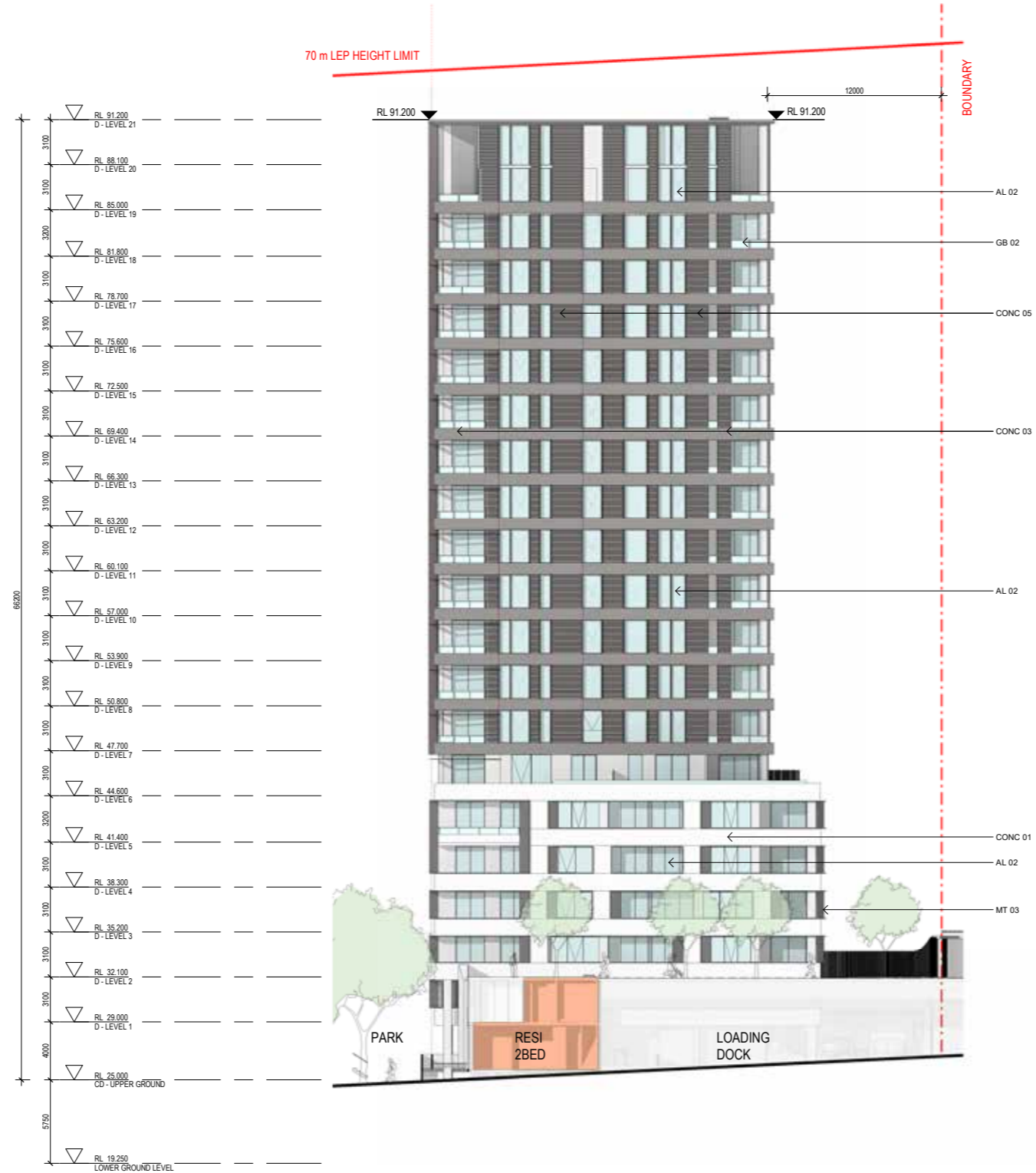
Drawing Title
 TOWER D - NORTH EAST
 ELEVATION

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Plotted and checked by	PDS	Approved	LMC	Issue
As indicated	180319	DA 3040	D	

4/02/2022 6:37:45 PM

WEST



- METAL**
- MT 01 - METAL FACADE ELEMENTS SILVER/GREY TITANIUM
- MT 02 - METAL FACADE ELEMENTS AND CLADDING TEAL ZINC
- MT 03 - METAL FACADE ELEMENTS AND CLADDING BLACK
- MT 04 - FEATURE METAL TO ENTRANCES AND KIOSK BRUSHED ALUMINUM/SIMILAR
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Arncliffe Summary of Design changes

Consultant

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Consultant
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Drawing Title

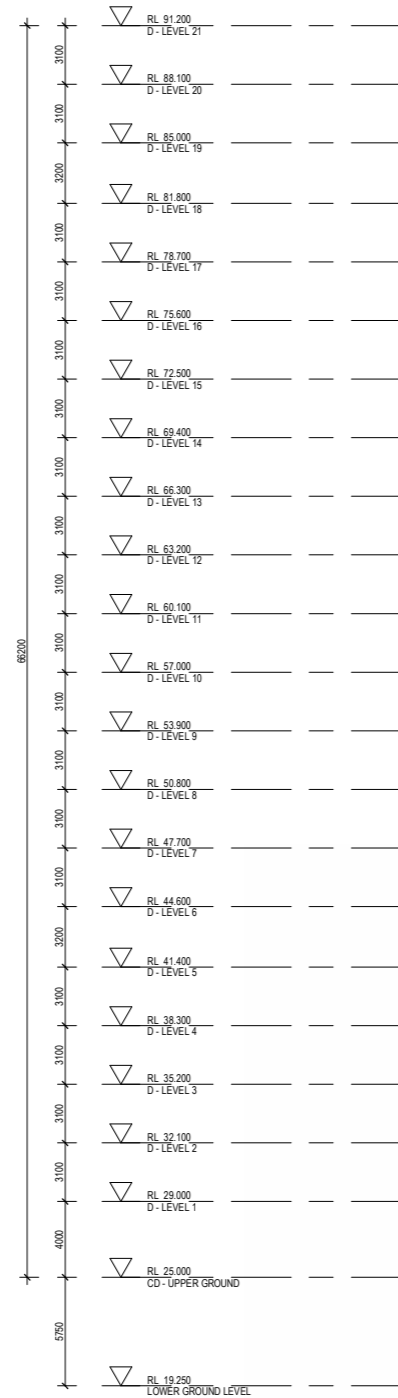
TOWER D - NORTH WEST
ELEVATION

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Scale	Project No	Drawing No	Issue	
As indicated	180319	DA 3041	C	

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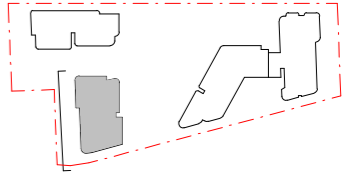
SOUTH



70 m LEP HEIGHT LIMIT



BOUNDARY



- METAL**
- MT 01 - METAL FACADE ELEMENTS SILVER/GREY TITANIUM
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Drawing Title
TOWER D - SOUTH WEST ELEVATION

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As indicated	180319	DA 3043	C	



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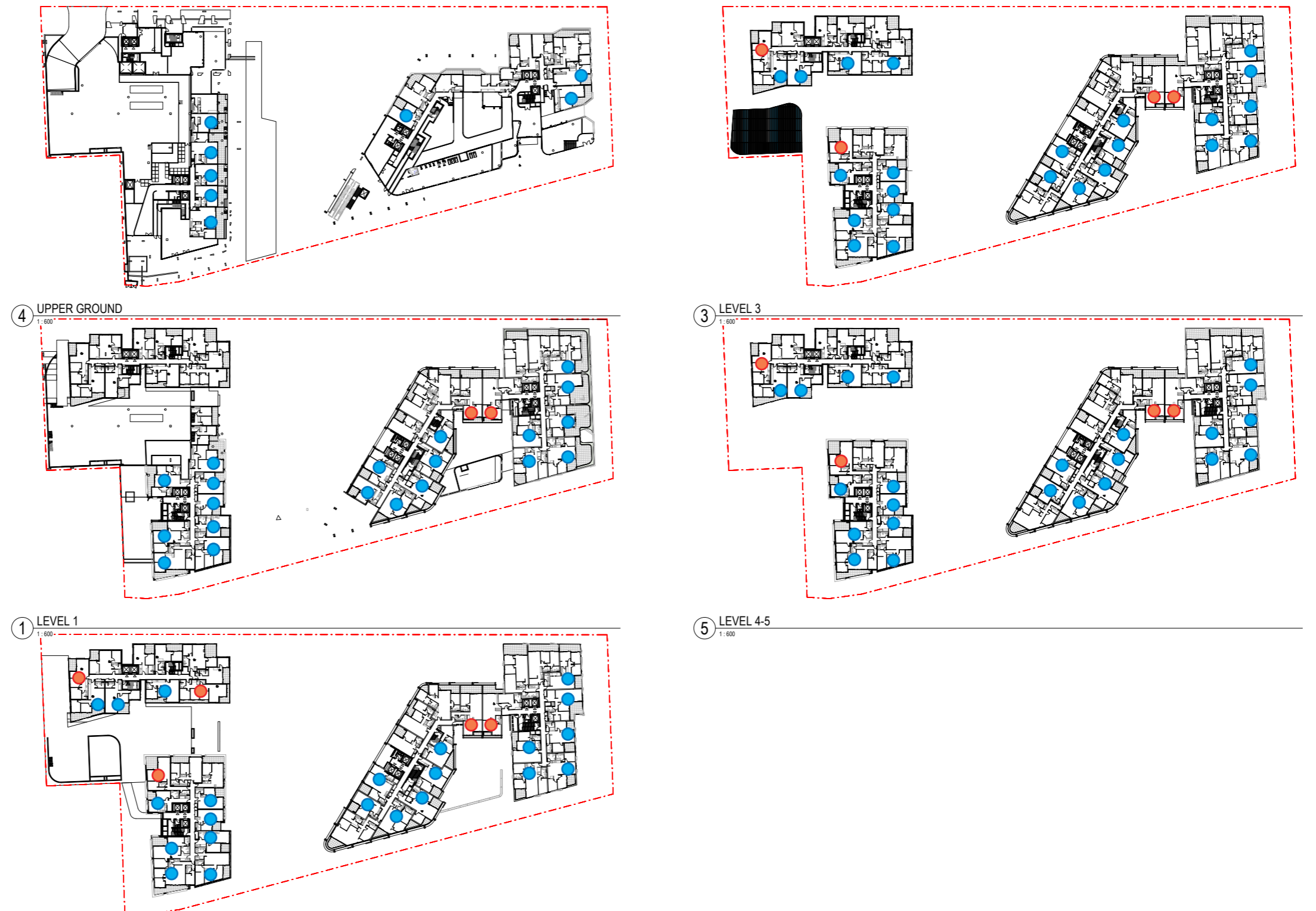
AMENITY AND VENTILATION



The SSDA acoustic report prepared by Stantec has identified areas of facade that will require alternative means of ventilation in order to achieve internal acoustic amenity in accordance with the NCC.

The design team with ongoing collaboration with services and acoustic engineers at JHA Consulting Engineers will be working to ensure compliance with consideration of additional measures that may be considered to improve resident amenity.

The following diagrams provide an indication of the number and location of impacted apartments based on preliminary noise assessments prepared by Stantec and reflected in their report as submitted with the SSDA. This number is anticipated to fluctuate through continued detailed design.

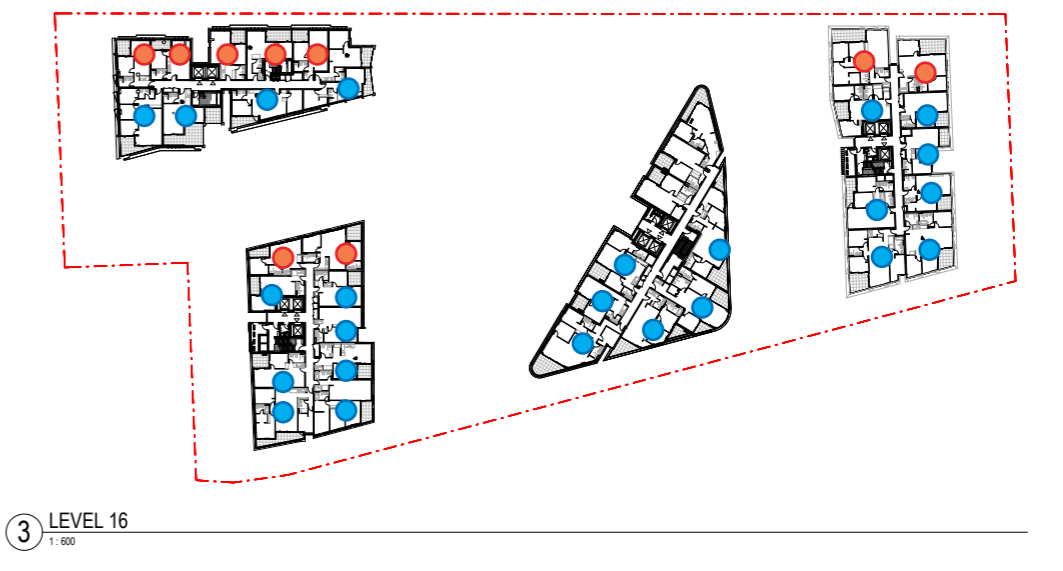
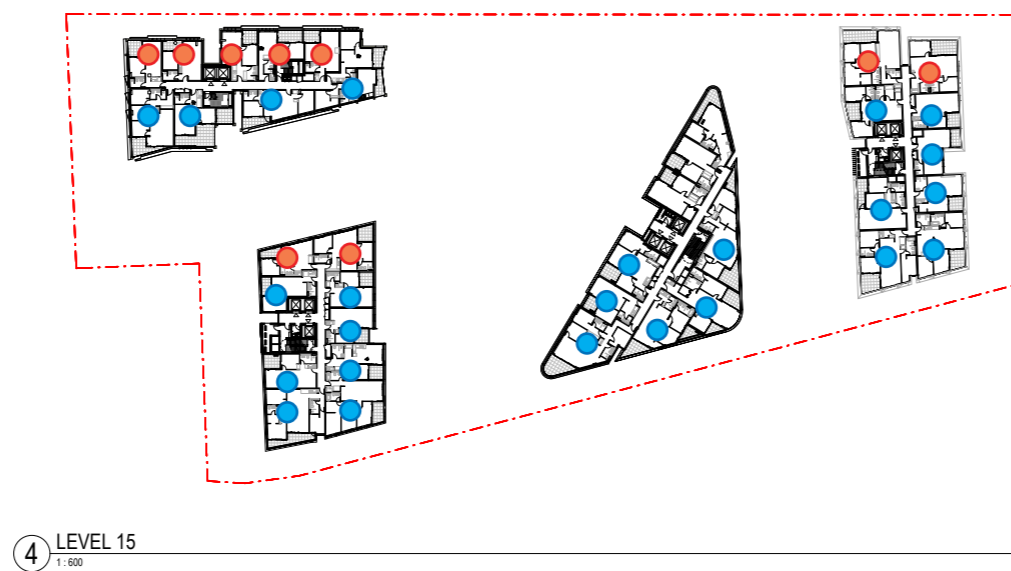
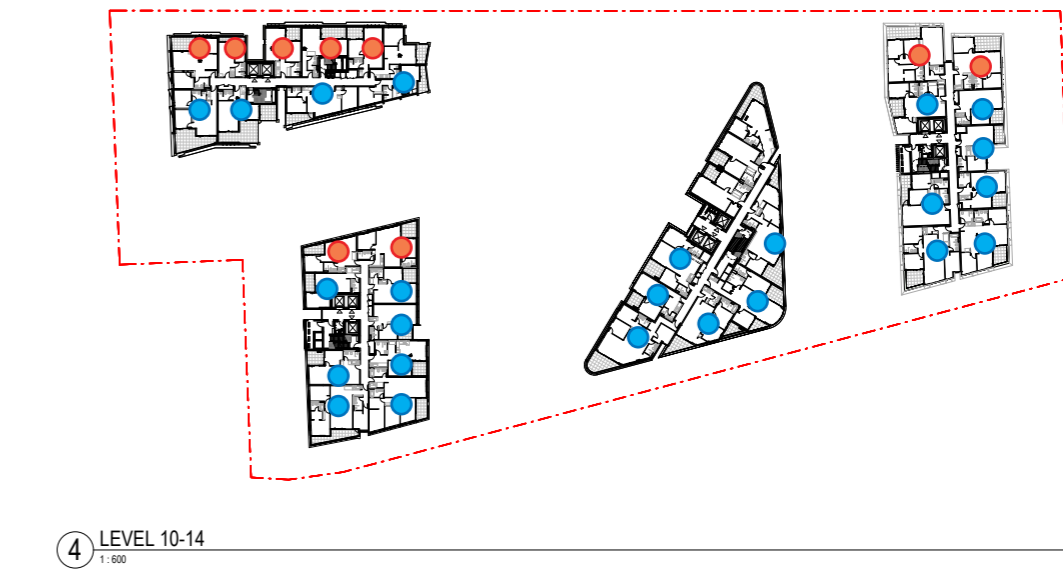
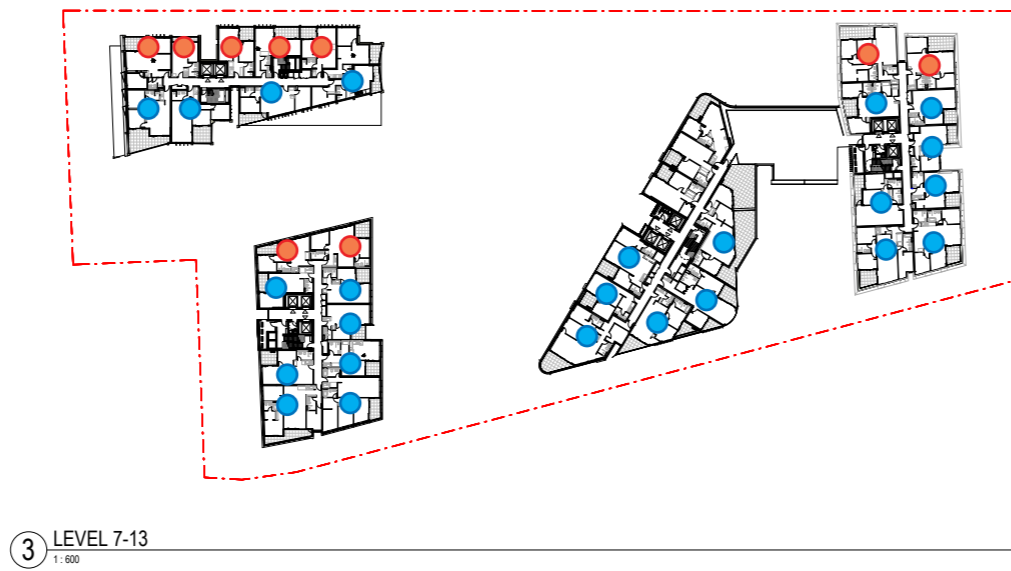
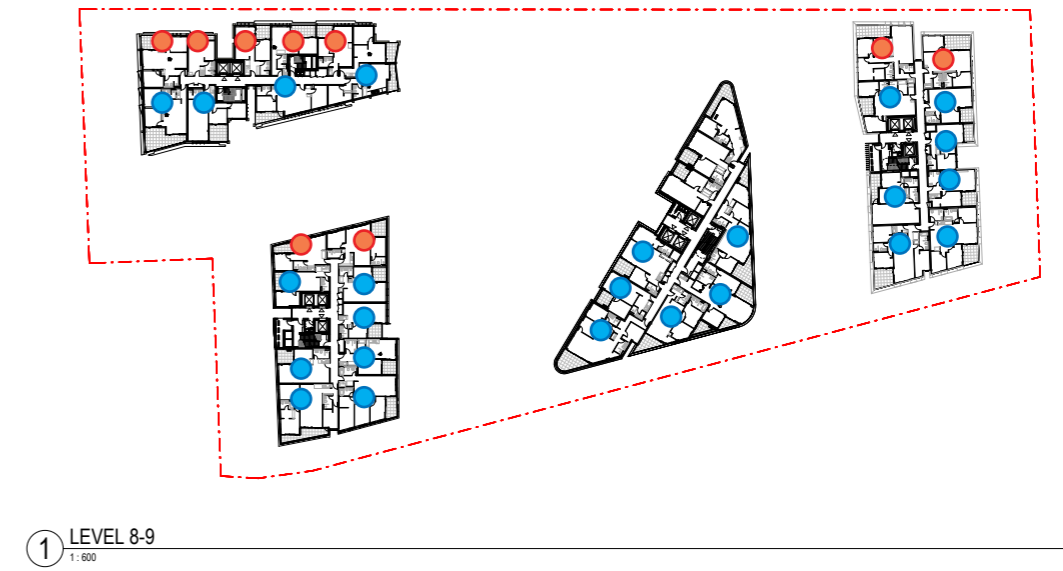
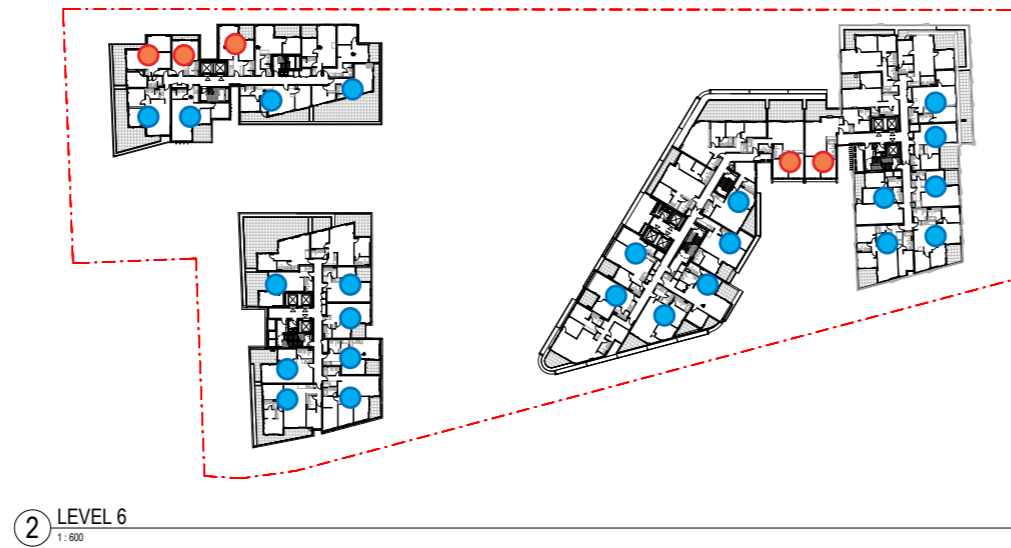
		
UPPER GROUND	8	0
LEVEL 1	20	2
LEVEL 2	22	5
LEVEL 3	23	4
LEVEL 4	23	4
LEVEL 5	23	4



-  Mechanical Ventilation to bedrooms and living areas
-  Mechanical Ventilation to bedrooms only

AMENITY AND VENTILATION

	●	●
LEVEL 6	23	5
LEVEL 7	24	9
LEVEL 8	24	9
LEVEL 9	24	9
LEVEL 10	24	9
LEVEL 11	24	9
LEVEL 12	24	9
LEVEL 13	24	9
LEVEL 14	24	9
LEVEL 15	24	9
LEVEL 16	24	9
LEVEL 17	24	9

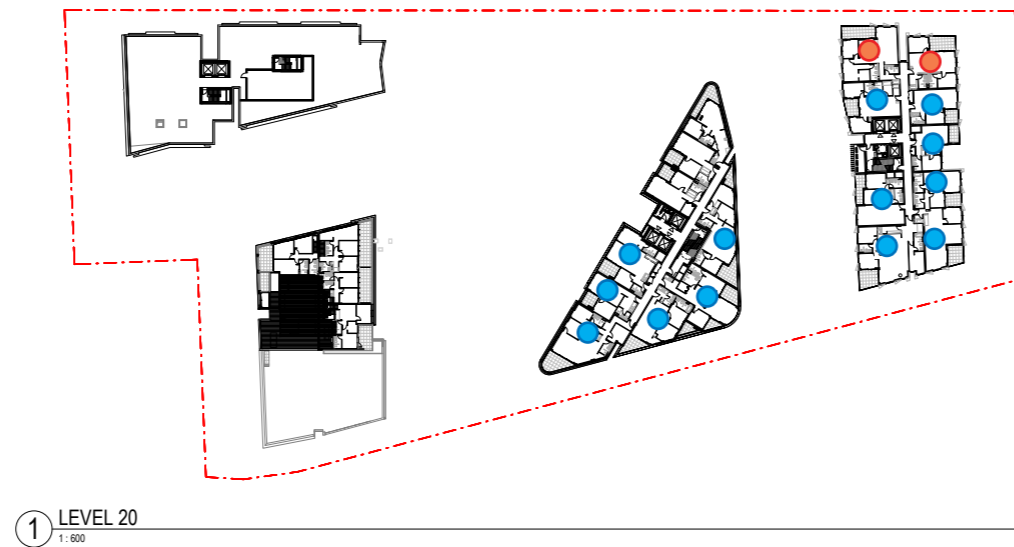
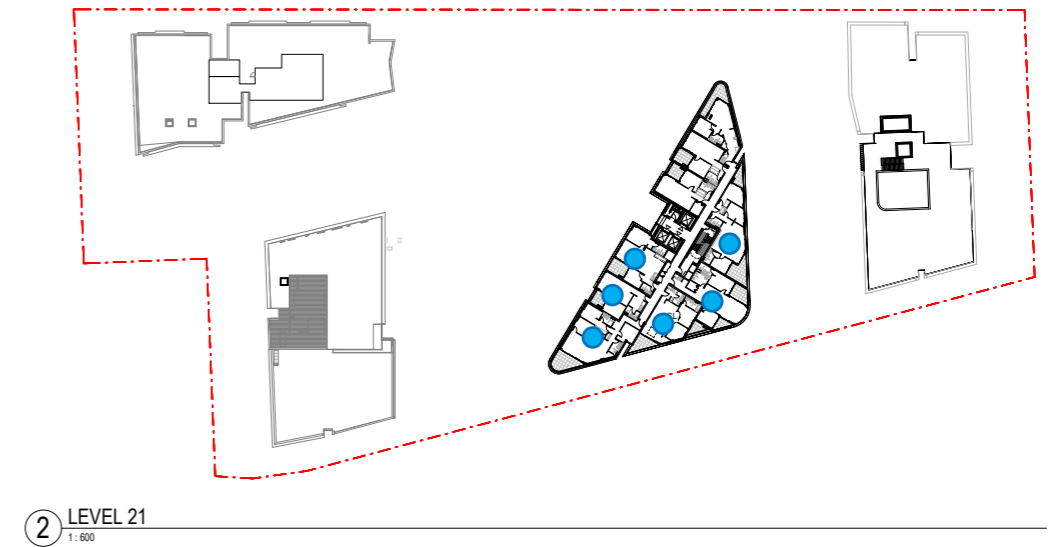
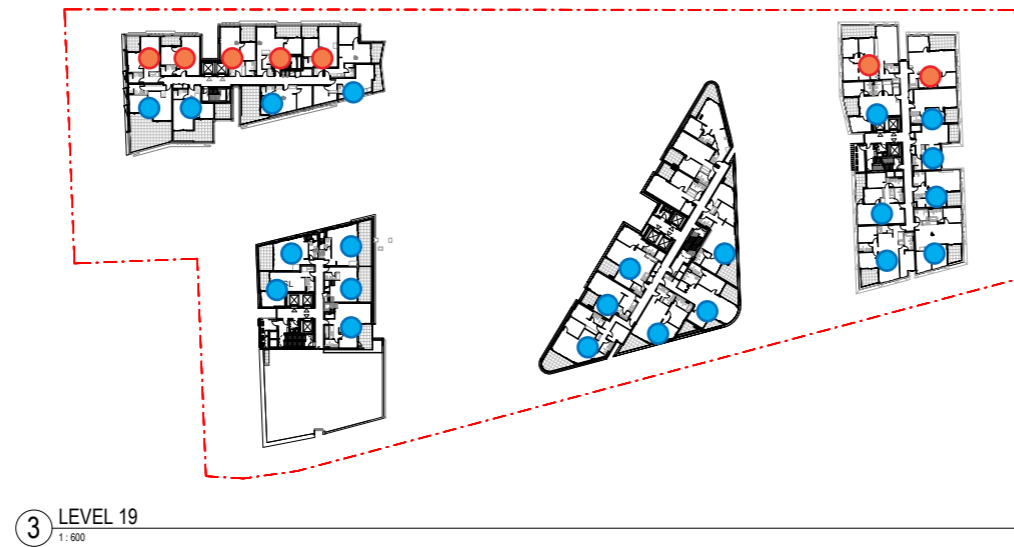
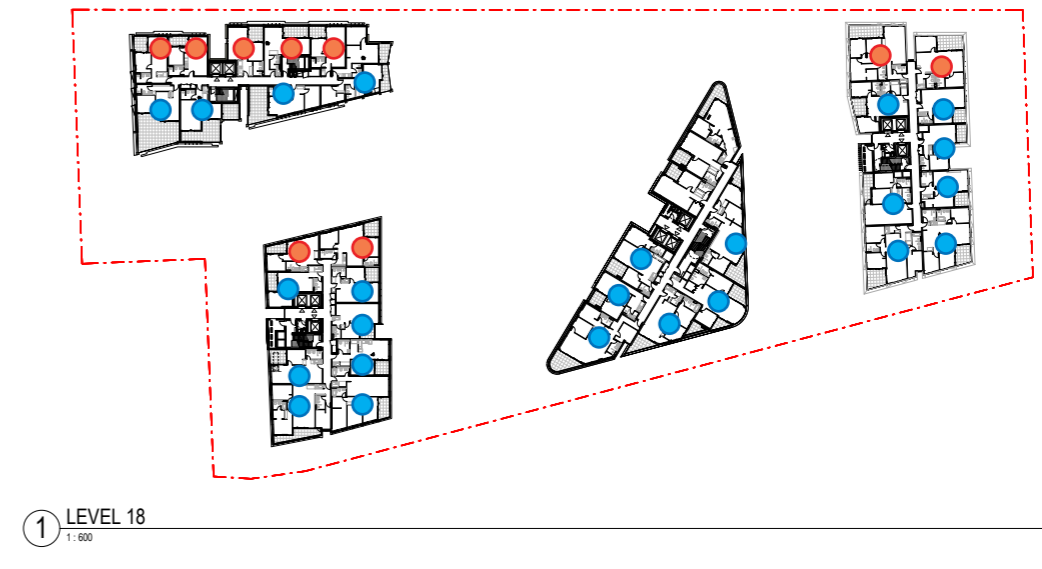
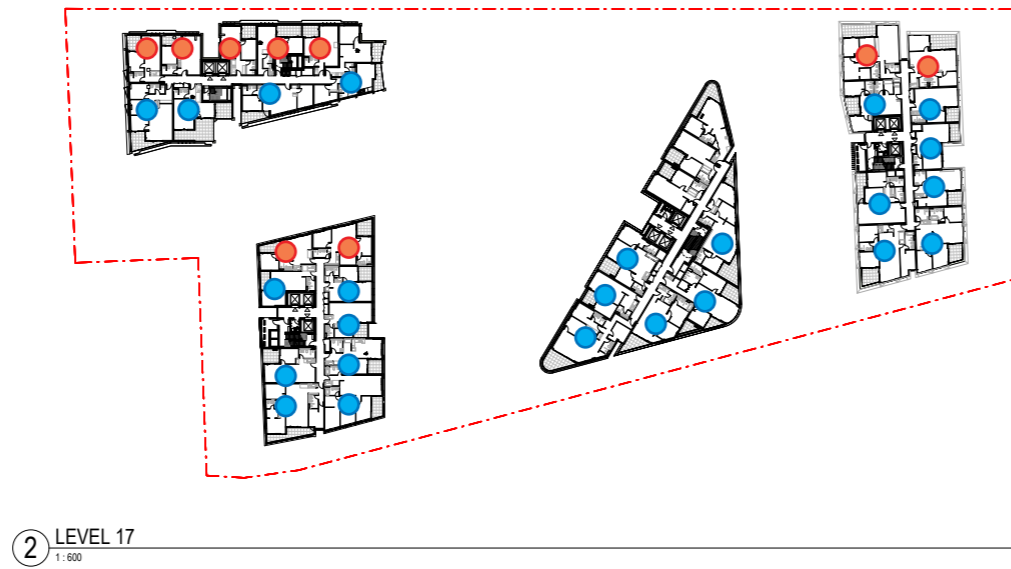


- Mechanical Ventilation to bedrooms and living areas
- Mechanical Ventilation to bedrooms only

AMENITY AND VENTILATION

	●	●
LEVEL 17	24	9
LEVEL 18	24	9
LEVEL 19	22	6
LEVEL 20	13	2
LEVEL 21	6	0
TOTAL*	495	149

*NOTE: Apartment numbers are based on preliminary assessments and will be subject to further design development. Above tables are indicative only at this time.



- Mechanical Ventilation to bedrooms and living areas
- Mechanical Ventilation to bedrooms only

PRIVACY TO BUILDING B

NOTES TO PODIUM PLAN

1. BALUSTRADES ARE NOW SOLID
2. ADDITIONAL VERTICAL PRIVACY FINNS TO BUILDING B PROVIDE ENHANCED PRIVACY TO THE PARK

NOTES TO TOWER PLAN

3. OFFSET PLANNING OF LIVING ROOMS FROM B TO D TO MITIGATE DIRECT CROSS VIEWING
4. SOLID UPSTANDS AND VERTICAL PRIVACY SCREENING

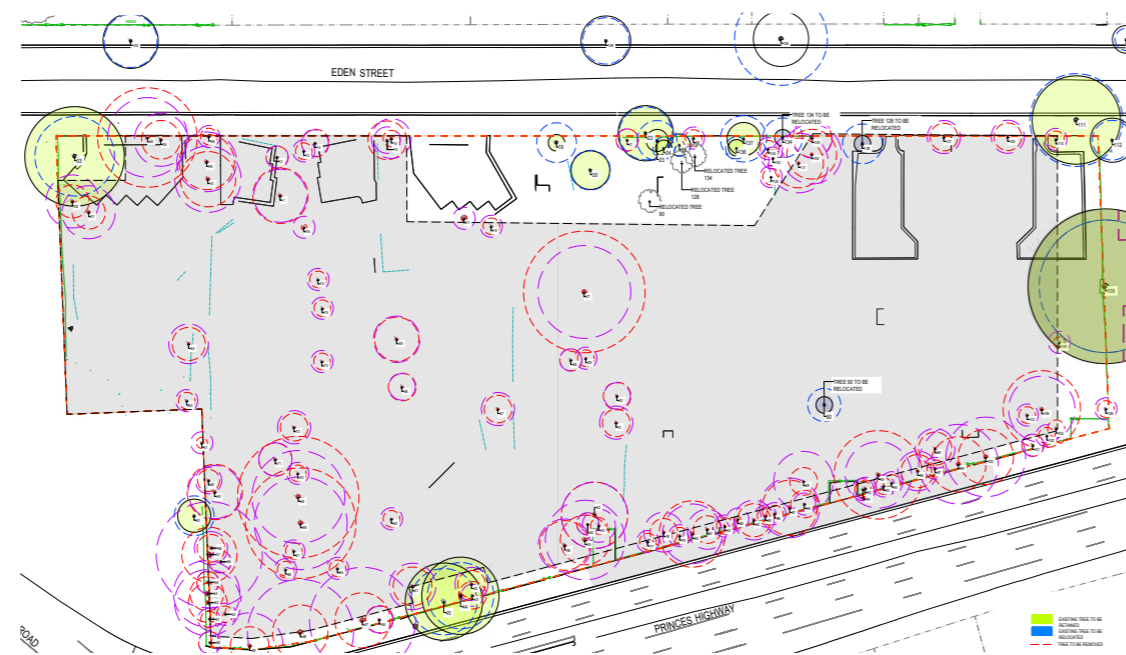


DEEP SOIL + TREE RETENTION

Key developments in deep soil and tree retention :

- _ 3m setback along princes hwy for deep soil
- _ additional 3m wide zone of 1.2m-4.7m depth soil above slab
- _ Deep soil/ basements pulled out of through site link
- _ Total deep soil 8%, deep soil + natural ground =13%
- _ tree 03 retained,vehicular access crossovers reduced 40% from 25m to 15m + basements reconfigured
- _ Tree 109 TPZ reduced impact (now 10%) with adjusted basements + lower ground to accommodate

tree retention plan



deep soil + natural ground + tree supporting planting zones



section of princes hwy setback

Princes Highway interface has been modified to accommodate a larger soil trench. The soil volume allocated to each tree varies between 100 - 120 m³, which is well above the DCP minimum requirement of 35 m³.

The DCP and PDG highlights the necessity to provide at least 35m³ of soil volume to each tree along the Landscape setback. The proposed design provides well over this requirement.

The proposed street section provides a consistent 3m natural soil from the boundary. An additional 3m zone is provided with soil on slab with depth varies between 1.2m and 4.7m. Natural soil is also provided in the street verge.

Proposed amended planting soil depth zones for ground level area:

Deep Soil + Natural Ground = 13% of site area

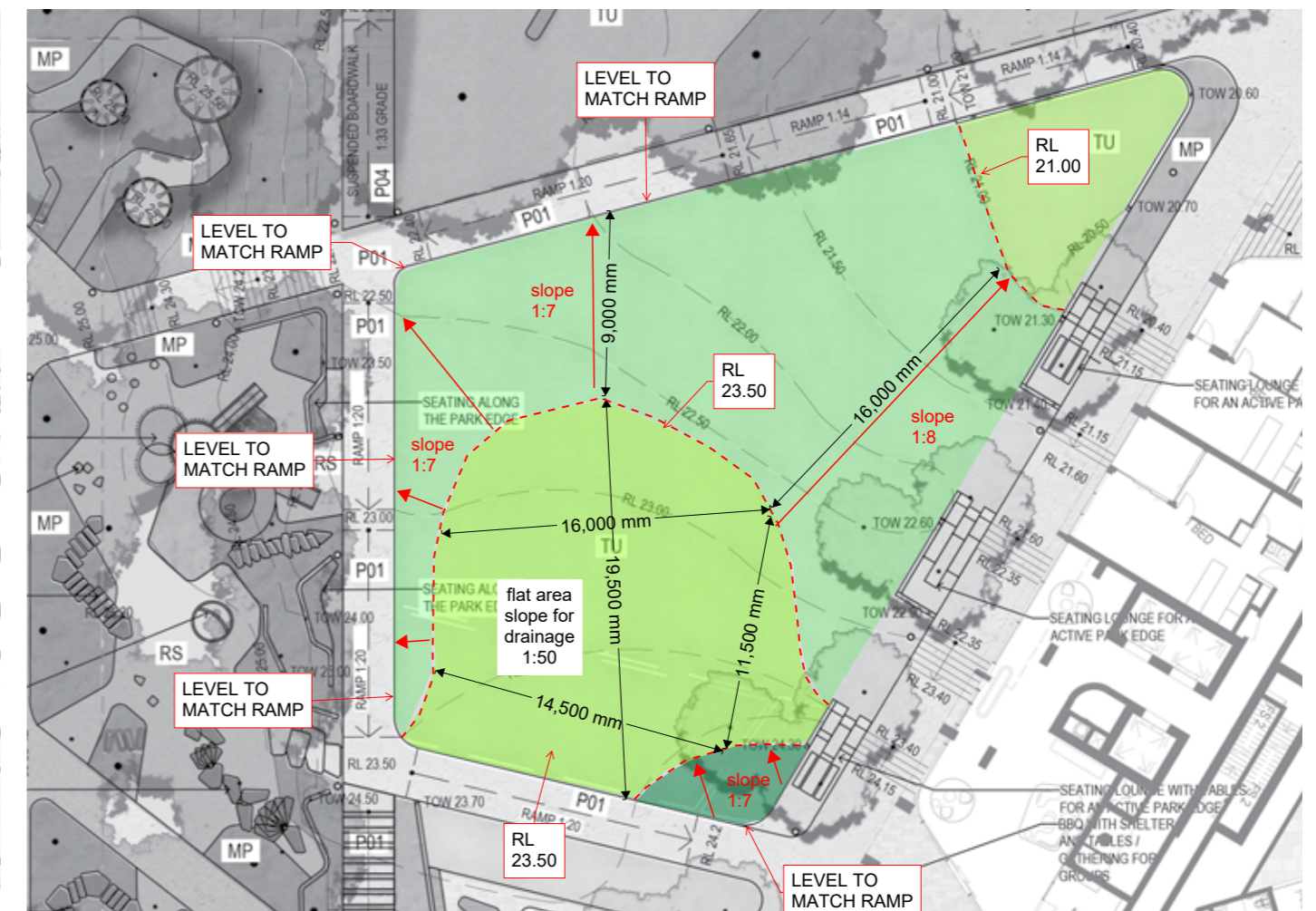
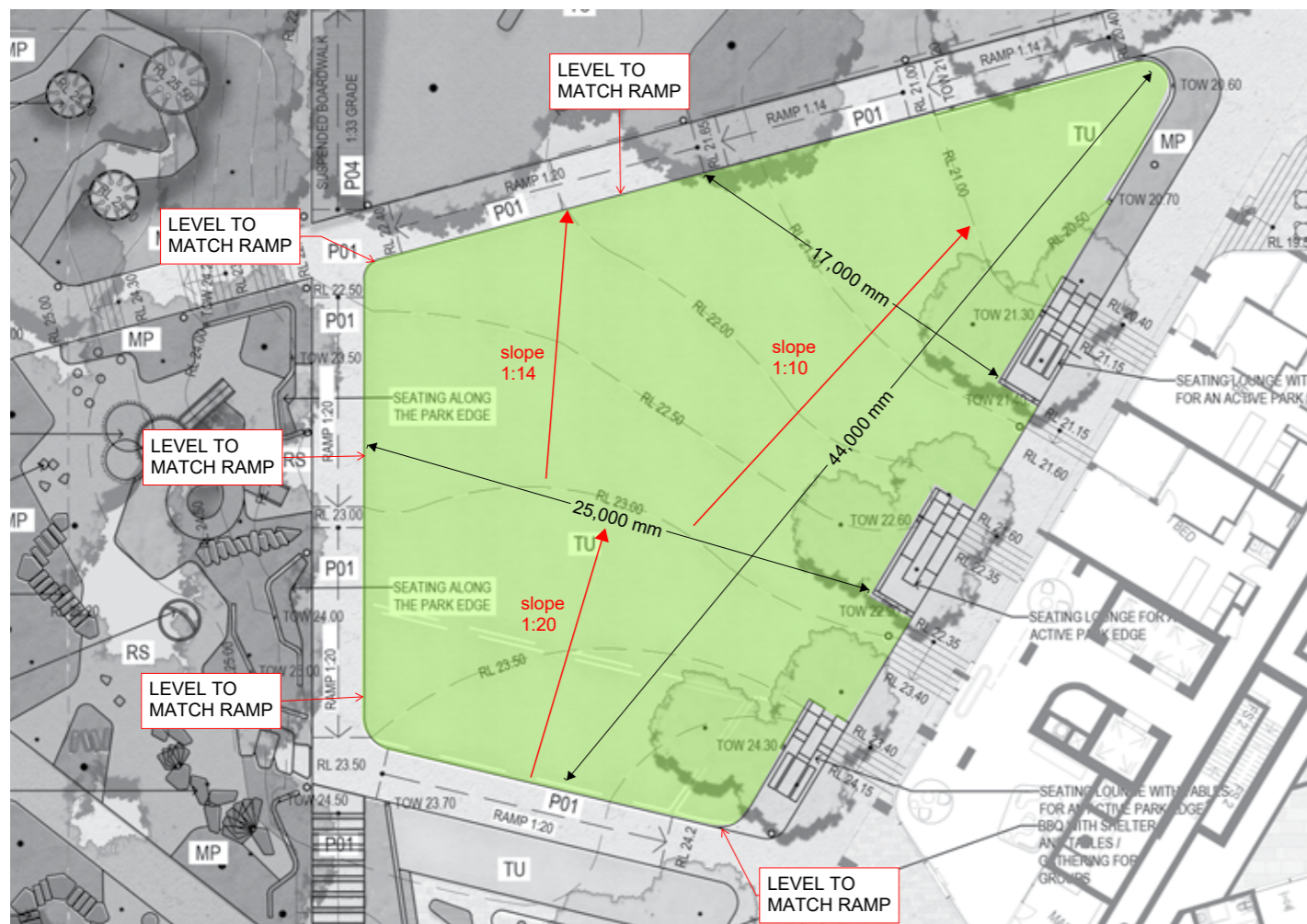
Area with soil depth suitable to establish tree planting = 33% of site area



- 1. Deep Soil (8%)
- 2. Natural Ground (5%)
- 3. Soil on Slab . Less than 600mm depth (1%)
- 4. Soil on Slab . Between 600-1000mm depth (6%)
- 5. Soil on Slab . Greater than 1000mm depth (13%)

PARK DESIGN

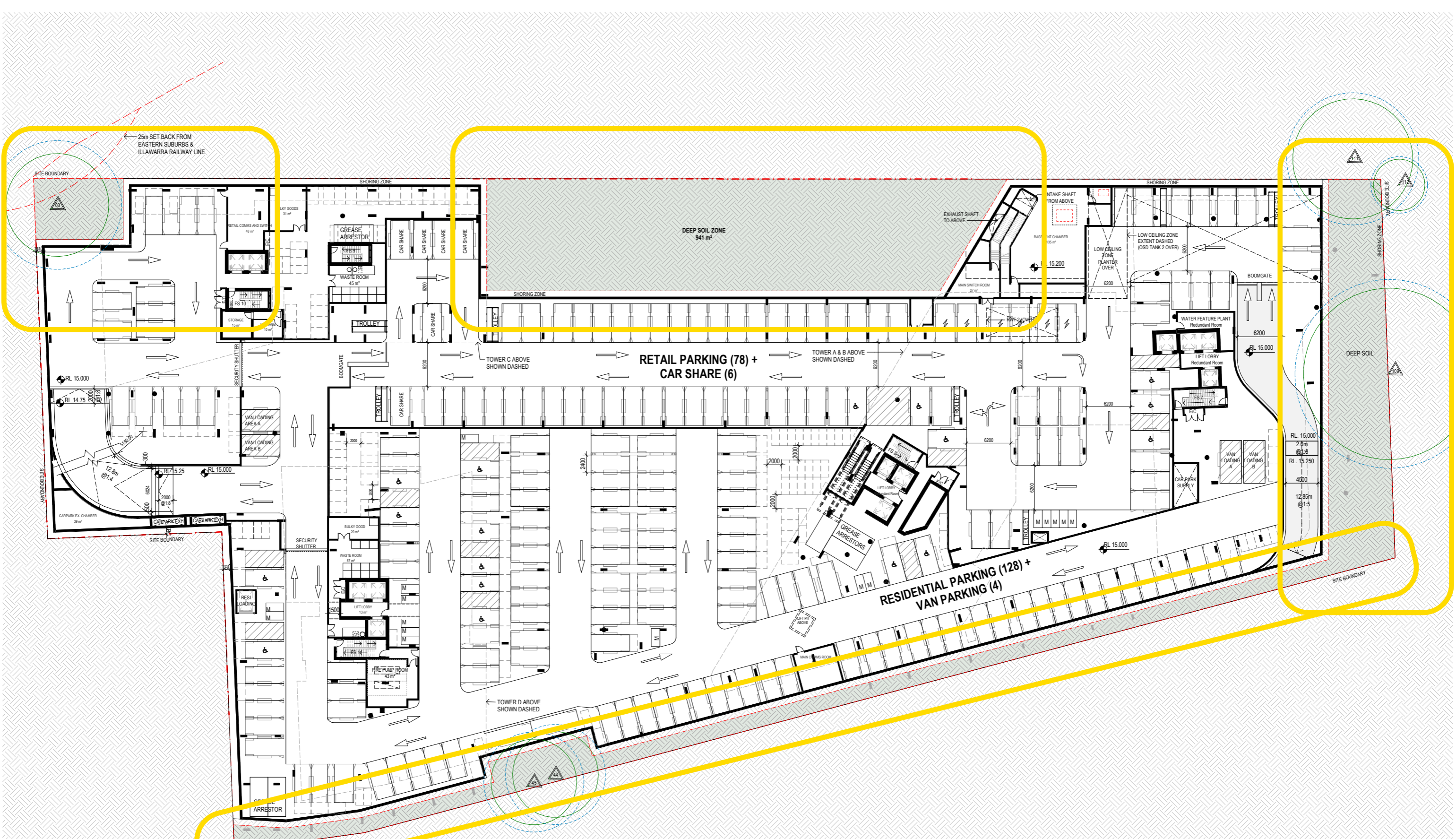
Park design for increased flat area



- Flat area defined in upper levels of the park
- Park area is generally sloping to tie into surrounding site levels to ensure permeability and equal access connectivity

As submitted for SSDA

Proposed amended park design levels



1 BASEMENT 1
1:250

KEY
 M : MOTORCYCLE
 V : VISITOR
 W : WASHBAY
 ♿ : ACCESSIBLE
 ⚡ : EV CHARGE
 North Point

DA SUBMISSION

Issue	Description	Date	Issue	Description	Date
8	ISSUED FOR INFORMATION	19/03/2021			
9	ISSUED FOR GANSW 03	24/03/2021			
10	ISSUED FOR CLIENT'S SIGN OFF	06/04/2021			
11	ISSUED FOR INFORMATION	07/04/2021			
12	ISSUED FOR CONSULTANTS	16/04/2021			
13	ISSUED TO BASIX	28/04/2021			
14	ISSUED FOR CONSULTANTS	10/05/2021			
A	ISSUED FOR DA	28/05/2021			
B	ISSUED FOR DA	01/07/2021			
C	ISSUED FOR REVIEW	08/11/2021			
D	ISSUED FOR DA	22/12/2021			

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 Level 6, 73 Miller Street, North Sydney
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 Consultant
STANTEC

Hydraulics
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JHA

Client
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 Meadowbank, NSW, 2114

Billbergia
 creating communities

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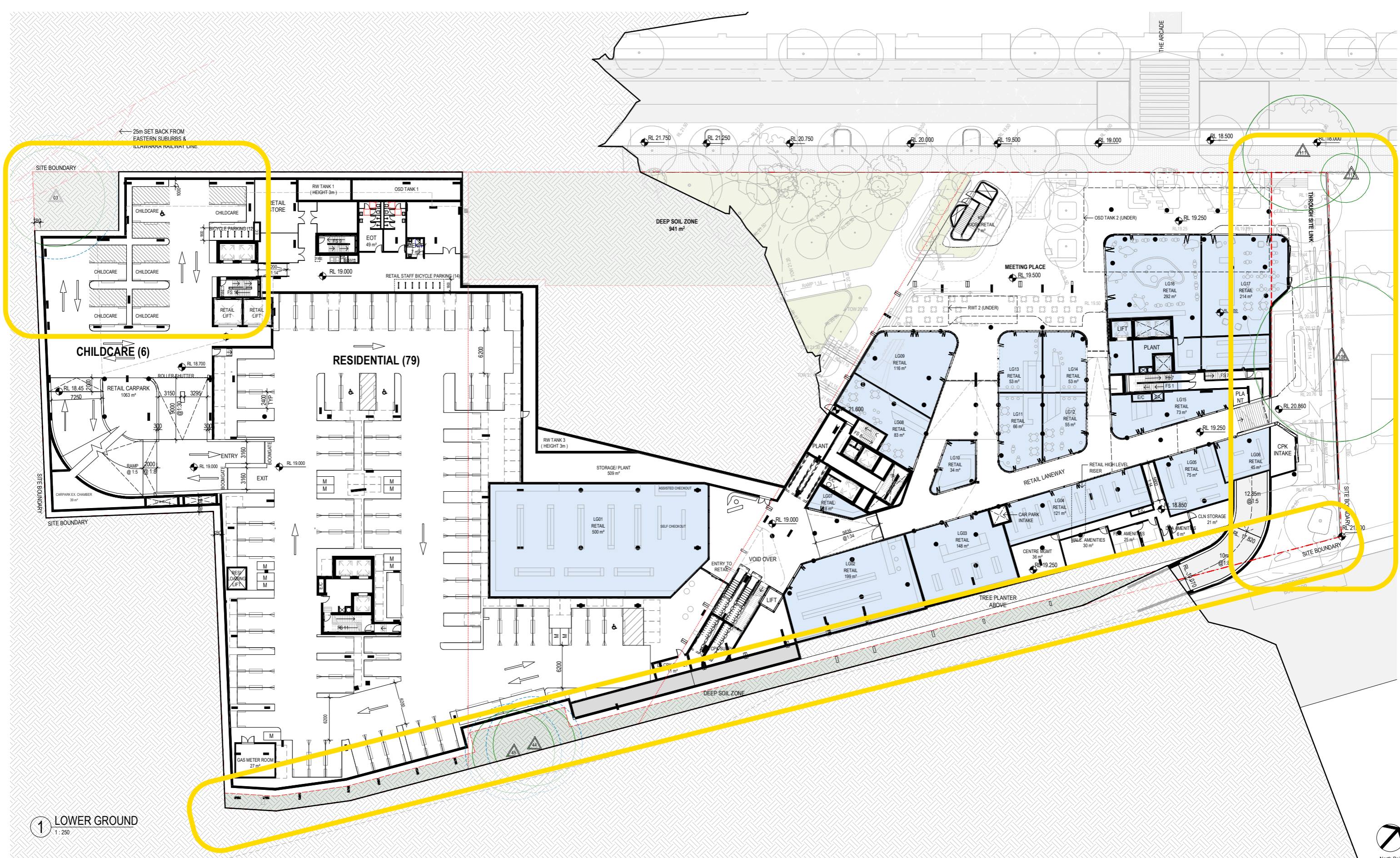
Project Title
 Eden Street Arncliffe

Drawing Title
 BASEMENT LEVEL 1

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Verified	PDS Approved LMC		
Drawing Created (date)	Drawing Created (by) _JK, SM, AR, EC, AF		
Scale	Project No	Drawing No	Issue
1:250	180319	DA 2003	D

7/10/2022 2:01:07 PM



1 LOWER GROUND
1:250



Issue	Description	Date	Amendments	Issue	Description	Date
10	ISSUED FOR GANSW 03	24/03/2021				
11	ISSUED FOR INFORMATION	07/04/2021				
12	ISSUED FOR CONSULTANTS	16/04/2021				
13	ISSUED TO BASIX	28/04/2021				
14	ISSUED FOR CONSULTANTS	10/05/2021				
15	ISSUED FOR INFORMATION	18/05/2021				
16	ISSUED FOR INFORMATION	21/05/2021				
A	ISSUED FOR DA	28/05/2021				
B	ISSUED FOR DA	01/07/2021				
C	ISSUED FOR REVIEW	08/11/2021				
D	ISSUED FOR DA	22/12/2021				

Consultant
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Project Title
Eden Street Arncliffe

Drawing Title
LOWER GROUND LEVEL

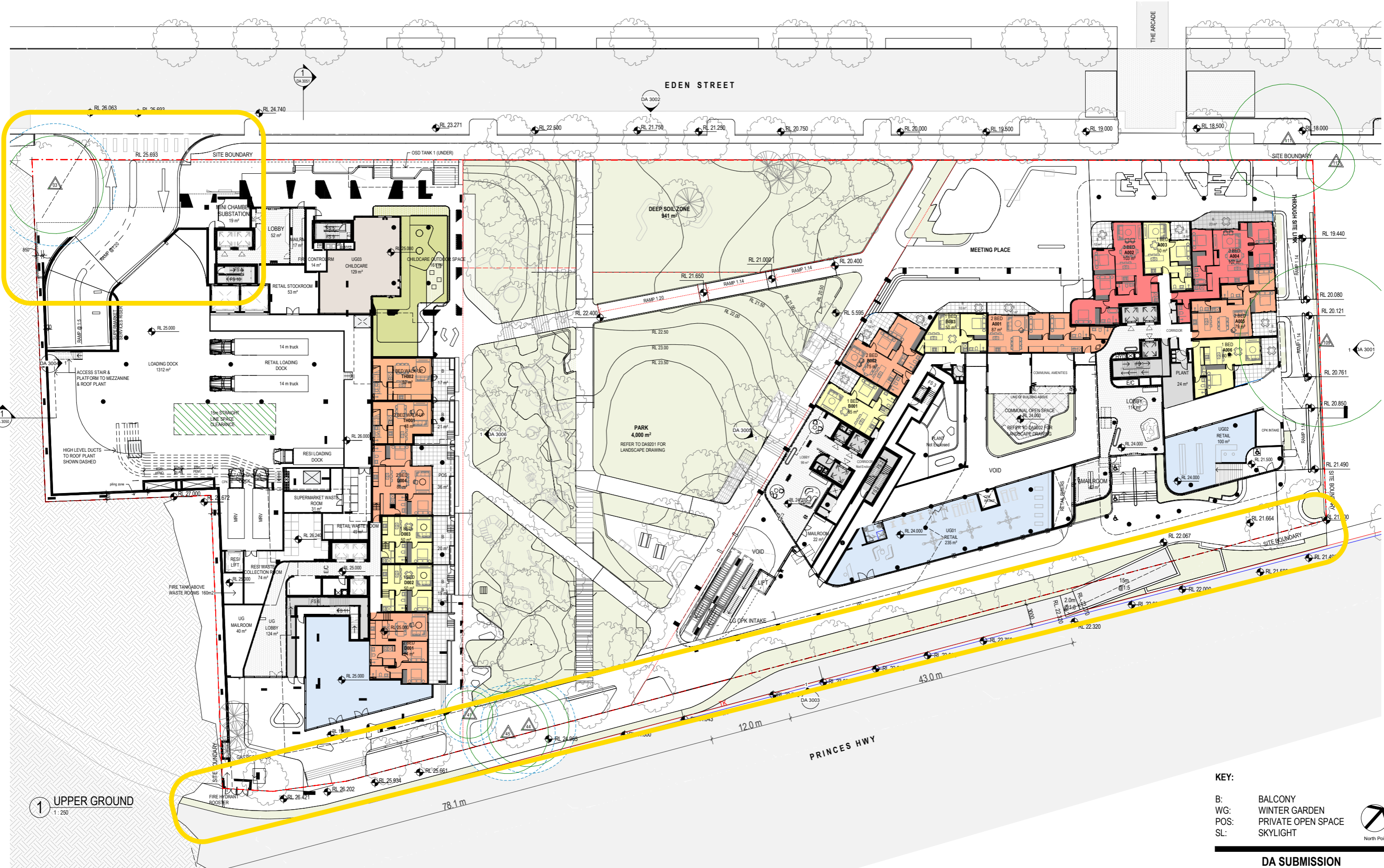
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DA SUBMISSION

Plotted and checked by	PDS		
Verified	PDS		
Approved	LMC		
Drawing Created (date)	Drawing Created (by) JK, SM, AR, EC, AF		
Scale	Project No	Drawing No	Issue
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22/10/2020

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1 UPPER GROUND
1:250

Issue	Description	Date	Amendments	Date
8	ISSUED FOR INFORMATION	08/03/2021		
9	ISSUED FOR INFORMATION	19/03/2021		
10	ISSUED FOR GANSW 03	24/03/2021		
11	ISSUED FOR INFORMATION	07/04/2021		
12	ISSUED FOR CONSULTANTS	16/04/2021		
13	ISSUED TO BASIX	28/04/2021		
14	ISSUED FOR CONSULTANTS	10/05/2021		
A	ISSUED FOR DA	28/05/2021		
B	ISSUED FOR DA	08/11/2021		
C	ISSUED FOR REVIEW	08/11/2021		
D	ISSUED FOR DA	22/12/2021		

Arncliffe Summary of Design changes

Consultant	Client
Structural Engineer / Civil Level 6, 73 Miller Street, North Sydney NSW 2060 Consultant	Billbergia Group Pty Ltd Suite 101, 25 Angas St, Meadowbank, NSW, 2114
Mechanical / Acoustic / Fire Engineer Level 6, Building B, 207 Pacific Highway St Leonards NSW 2065 Consultant	
Hydraulics Level 23, 101 Miller Street, North Sydney, NSW 2060	

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Project Title
Eden Street Arncliffe

Drawing Title
UPPER GROUND LEVEL

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KEY:

B: BALCONY
WG: WINTER GARDEN
POS: PRIVATE OPEN SPACE
SL: SKYLIGHT

North Point

DA SUBMISSION

Plotted and checked by PDS
Verified PDS Approved LMC
Drawing Created (date) Drawing Created (by) JK, SM, AR, EC, AF

22/10/2020

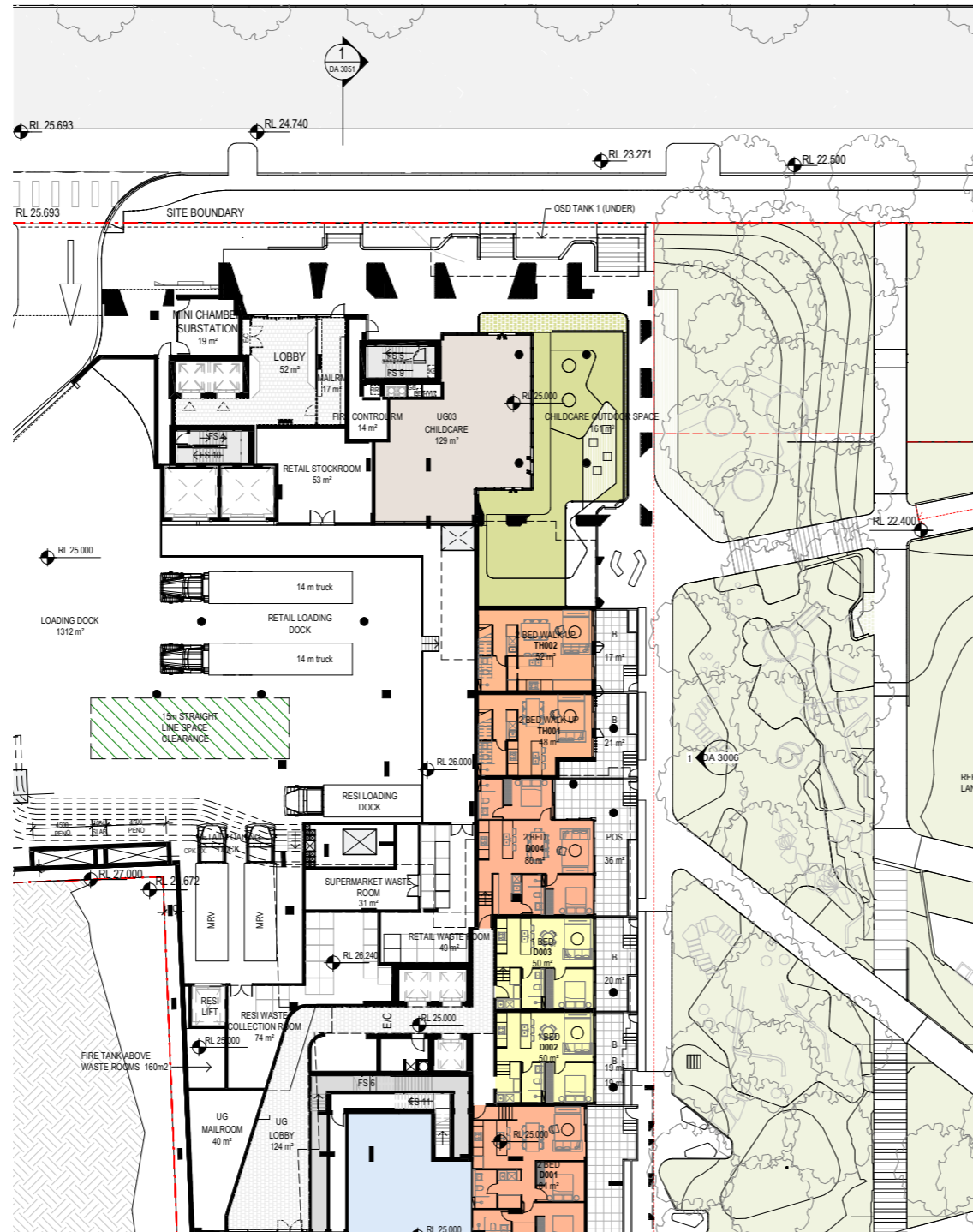
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CHILDCARE RELOCATION

The childcare has been relocated from the ground level (upper ground plan) of building D to Building C on upper ground and level 1. The childcare outdoor space is now also located within the building footprint.

The setback zone of building D from the Princes Hwy which was the childcare outdoor area has been redesigned as public realm landscape and lobby arrival for the residential lobby of D.



Upper Ground Plan - Building D



Level 1 - Building D

MEETING PLACE

The programme of the meeting place has been developed to provide a larger gathering and ceremony space. The kiosk is now embedded a landscape element with tiered seating to the meeting place and park.

More substantial landscape and seating areas have been provided in front of the retail area opposite the crosswalk and arcade to free up the meeting place for a more changing programme of community events (welcome to country/NAIDOC events, markets, ceremonies, talks and shows).

The ground floor area has returned to retail.

A summary of the proposed design

- ① Kiosk / Alfresco seating
- ② Gathering and stage
- ③ Abstract banksia paving pattern
- ④ Tree planting
- ⑤ Seating steps
- ⑥ Alfresco area
- ⑦ Landscaped area with seating
- ⑧ Through site link



VIEW TOWARDS EDEN ST FROM RETAIL ENTRY



MEETING PLACE

view from eden st looking east to A and through site link



view paralel to eden st looking north to A forecourt



view from eden st looking east to meeting place, retail + B



view paralel to eden st looking north to meeting place and A behind trees



Amendments		Amendments	
Issue	Description	Date	Date
1	ISSUED FOR PRE-DA	30/10/2020	
2	ISSUED FOR INFORMATION	28/11/2020	
3	ISSUED FOR GANSW 3	24/03/2021	
4	ISSUED FOR CONSULTANTS	20/04/2021	
5	ISSUED FOR CONSULTANTS	11/05/2021	
6	30% DRAFT DA ISSUE	24/05/2021	
7	ISSUED FOR DA	25/05/2021	
8	REVISED SODA	08/12/2021	

Client
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 Client Details



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 scen architect M. Steadon 2890

Project Title
Eden Street Arncliffe
 Drawing Title
**Landscape General Arrangement Plan
 Lower Ground Level**
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Verified	FC	Approved	SH
Drawing Created (28/10/2020)		Drawing Created (By)	BP
			22/10/2020
Scale	Project No	Drawing No	Issue
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Amendments			Amendments		
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4	ISSUED FOR PRE-DA	12/11/2020			
8	ISSUED FOR INFORMATION	15/11/2020			
1	ISSUED FOR INFORMATION	28/11/2020			
2	ISSUED FOR INFORMATION	02/02/2021			
3	ISSUE FOR GANSW 3	24/03/2021			
4	ISSUED FOR CONSULTANTS	30/04/2021			
5	ISSUED FOR CONSULTANTS	11/05/2021			
7	90% DRAFT DA ISSUE	23/09/2021			
7	RE-ISSUED FOR DA	25/09/2021			
8	ISSUED FOR INFORMATION	01/10/2021			

Arnccliffe Summary of Design changes

Client
Billbergia
Client Details



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Project Title
Eden Street Arnccliffe
Drawing Title
**Landscape General Arrangement Plan
Upper Ground Level**
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2	ISSUED FOR INFORMATION	02/02/2021			
3	ISSUE FOR GANSW 3	24/03/2021			
4	ISSUED FOR CONSULTANTS	30/04/2021			
5	ISSUED FOR CONSULTANTS	11/05/2021			
6	90% DRAFT DA ISSUE	21/05/2021			
7	RE-ISSUED FOR DA	21/05/2021			
8	ISSUED FOR INFORMATION				

Arncliffe Summary of Design changes

Client
Billbergia
Client Details



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 Drawing Title
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 Combined Rooftop Plan**
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Plotted and checked by: RZ			
Verified	RZ	Approved	SH
Drawing Created	(28/10/2020)	Drawing Created (by)	BP
			22/10/2020
Scale	Project No	Drawing No	Issue
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