



1 – 5 SPEED STREET LIVERPOOL

MIXED USE TOWER MASTERPLAN





A S1502, LEVEL 15, CITADEL TOWERS, TOWER B,
799 PACIFIC HIGHWAY, CHATSWOOD, NSW 2067
T (02) 8068 8318
E INFO@DREAMSGROUP.COM.AU
W WWW.DREAMSGROUP.COM.AU



SYDNEY OFFICE: SUITE 15, LEVEL 1, 469-475
PARRAMATTA ROAD, LEICHARDT, NSW 2040
T 9569 1100
E GAT@GATASSOC.COM.AU
W WWW.GATANDASSOCIATES.COM.AU

CONTENTS

1.0_URBAN CONTEXT & SITE ANALYSIS

1.01_SITE LOCATION	05
1.02_IMMEDIATE SITE SURROUNDS	06
1.03_SITE VEGETATION	07
1.04_HERITAGE ITEMS	08
1.05_SITE CONTOURS	09
1.06_EXISTING SITE PHOTOS	10
1.07_SURROUNDING STREET SETBACKS	11
1.08_SITE ZONING CHANGES	12
1.09_LAND USE CHANGES	13
1.10_PRECINCT CHANGES	14

2.0_MASTER PLANNING

2.01_AVIATION HEIGHT LIMITS	16
2.02_ALTERNATIVE BUILD FORM	17
2.03_PRIMARY ENVELOPE (PODIUM)	18
2.04_PRIMARY ENVELOPE (TOWER)	19
2.05_BUILT FORM CRAFTING	20
2.06_MASSING STRATEGY	21
2.07_FEASIBILITY SECTION	22
2.08_SHARED OPEN SPACE	23
2.09_HERITAGE: DEL ROSA	24
2.10_POTENTIAL FUTURE CONNECTION	26
2.11_32-36 TERMINUS STREET	27

3.0_DESIGN EVOLUTION & RESPONSE

3.01_GENERAL MASSING	29
3.02_FACADE DESIGN	30

4.0_MATERIAL SCHEDULES

4.01_MATERIAL SCHEDULE	33
4.02_PODIUM LEVEL CAR PARKS	34
4.03_PEDESTRIAN/COMMERCIAL LEVEL	35
4.04_SHARED OPEN SPACE/PRECEDENTS	36

1.0 URBAN CONTEXT & SITE ANALYSIS

THIS SECTION CONSIDERS:

- 1.01_SITE LOCATION
- 1.02_IMMEDIATE SITE SURROUNDS
- 1.03_SITE VEGETATION
- 1.04_HERITAGE ITEMS
- 1.05_SITE CONTOURS
- 1.06_EXISTING SITE PHOTOS
- 1.07_SURROUNDING STREET SETBACKS
- 1.08_SITE ZONING CHANGES
- 1.09_LAND USE CHANGES
- 1.10_PRECINCT CHANGES









1.0_URBAN CONTEXT & SITE ANALYSIS

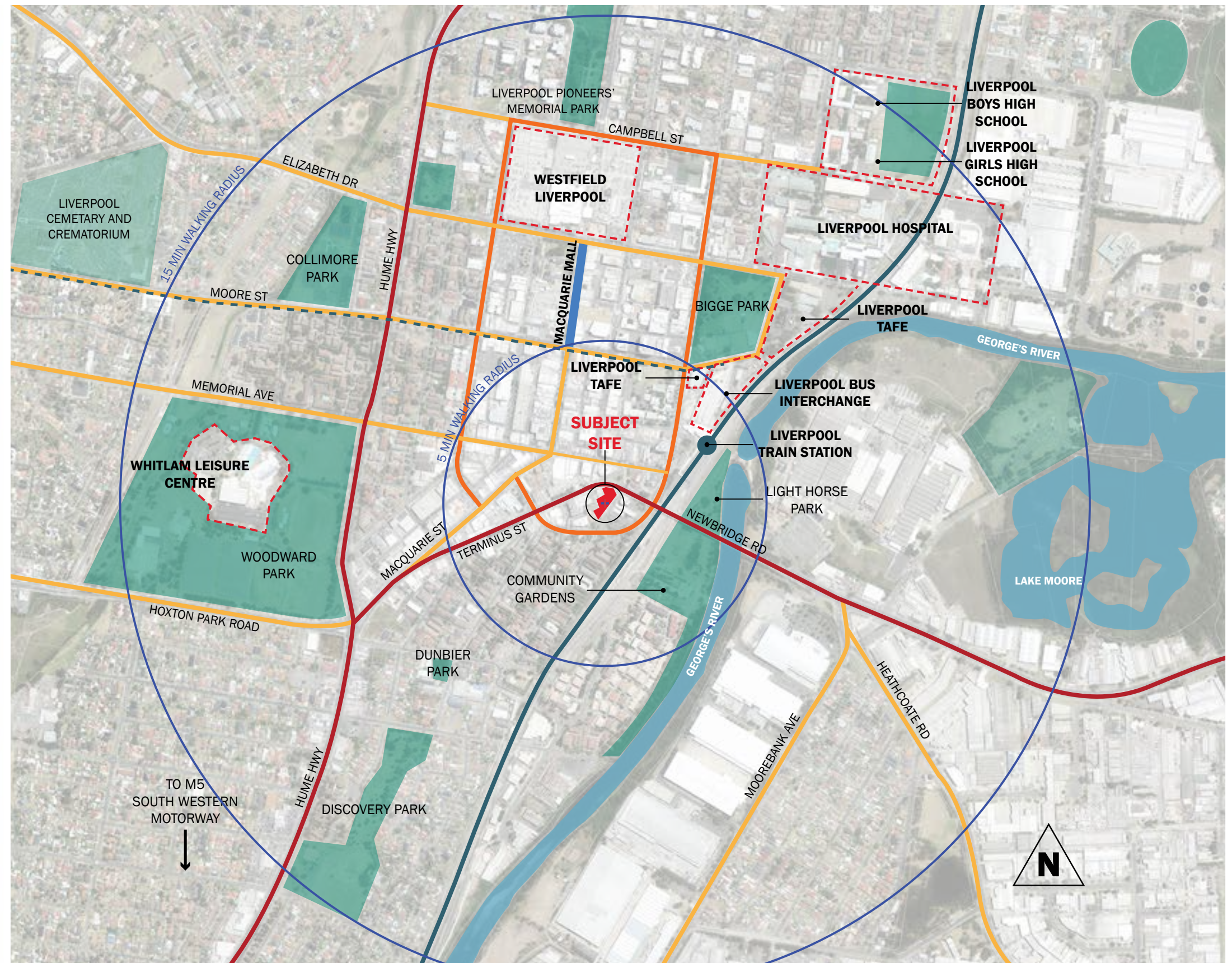
1.01_SITE LOCATION 1:10 000

The subject site locates in the CBD of the Liverpool city. It has proximity to the public transport; arterial road; shopping centres; employment generators; open spaces and educational facilities.

They include train station and bus interchange (200m); Westfield shopping centre (500m); CBD area (100m); Georges River & its open spaces (150m); Numbers of public open space (Bigge Park, Woodward Park etc.); Wollongong university new campus (50m); Liverpool high schools (800m); Liverpool Hospital(600m).

These institutes and facilities provide both demands for higher density housing and capability to accommodate those future residents.

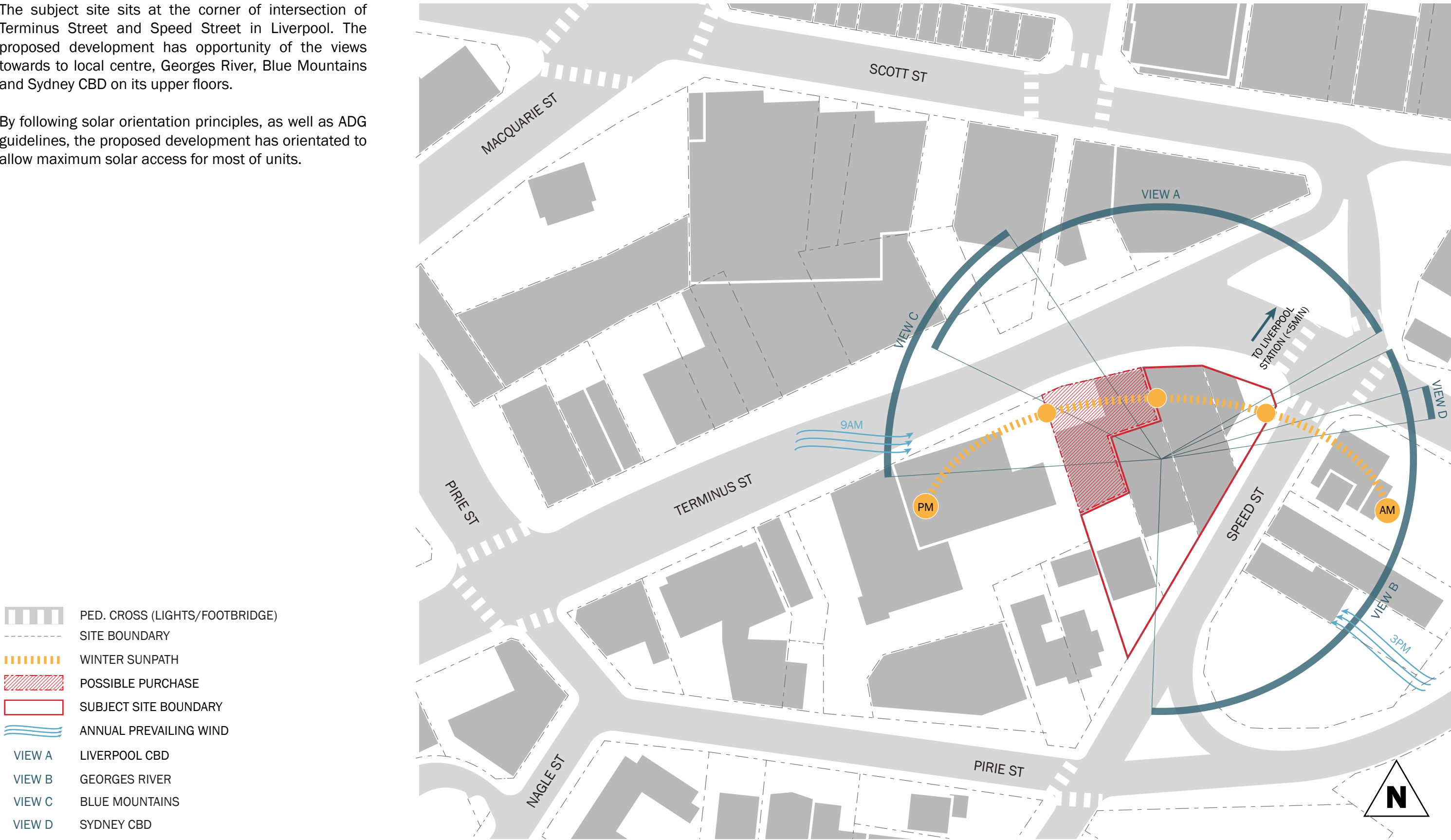
-  INFRASTRUCTURE/FACILITY/INSTITUTE
-  PARK/GREENSPACE
-  WATERCOURSE
-  TRAIN LINE
-  T-WAY
-  ARTERIAL ROAD
-  COLLECTOR ROAD
-  CBD RING ROAD



1.02_IMMEDIATE SITE SURROUNDS 1:1 000

The subject site sits at the corner of intersection of Terminus Street and Speed Street in Liverpool. The proposed development has opportunity of the views towards to local centre, Georges River, Blue Mountains and Sydney CBD on its upper floors.

By following solar orientation principles, as well as ADG guidelines, the proposed development has orientated to allow maximum solar access for most of units.



1.03_SITE VEGETATION 1:1000





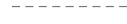
The only vegetation under consideration is the tree at the south corner of the subject site. The surrounding urban context has limited existing vegetation. The subject development is considered to provide no impact to those street trees and bushes.



1.04_HERITAGE ITEMS 1:1000

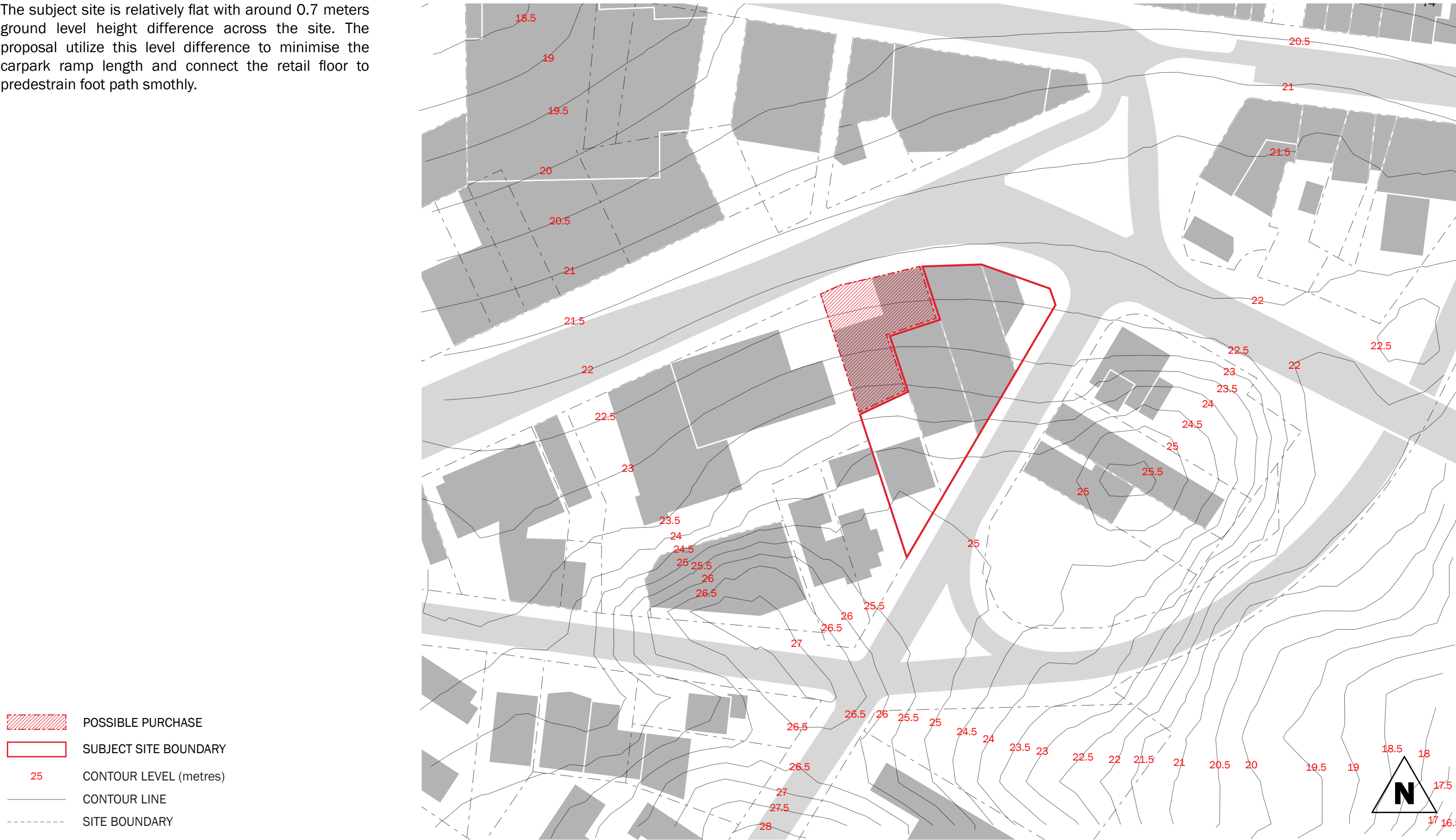
There are several heritage itmes sitting around the subject site. The heritage building at LOT 106 (7 Speed Street) was the main factor under consideration. The proposed facade face to the heritage building is designed to provide fine-grain material (brick) to match the heritage item’s roof colour. A heritage assessment is provided with this application by NBRs.



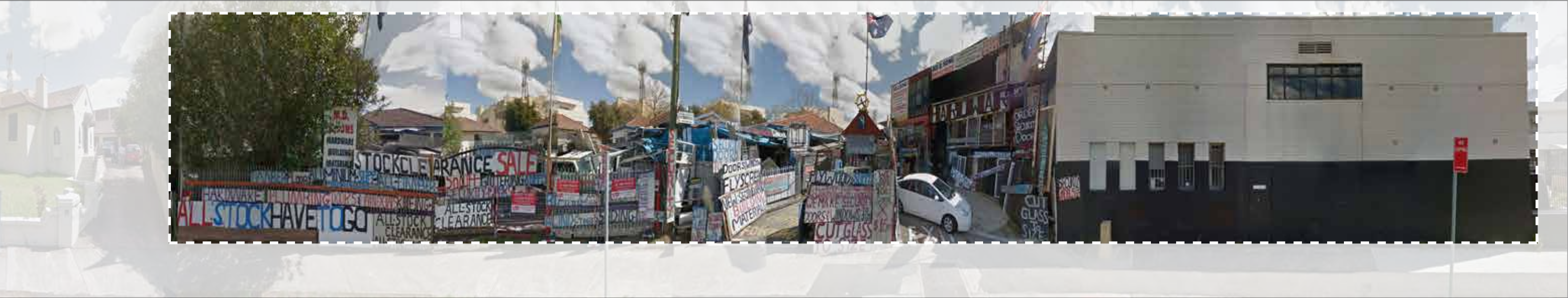
-  BIGGE PARK CONSERVATION AREA
-  HERITAGE ITEM (GENERAL)
-  POSSIBLE PURCHASE
-  SUBJECT SITE BOUNDARY
-  SITE BOUNDARY

1.05_SITE CONTOURS 1:1000

The subject site is relatively flat with around 0.7 meters ground level height difference across the site. The proposal utilize this level difference to minimise the carpark ramp length and connect the retail floor to predestrain foot path smothly.



1.06_EXISTING SITE PHOTOS



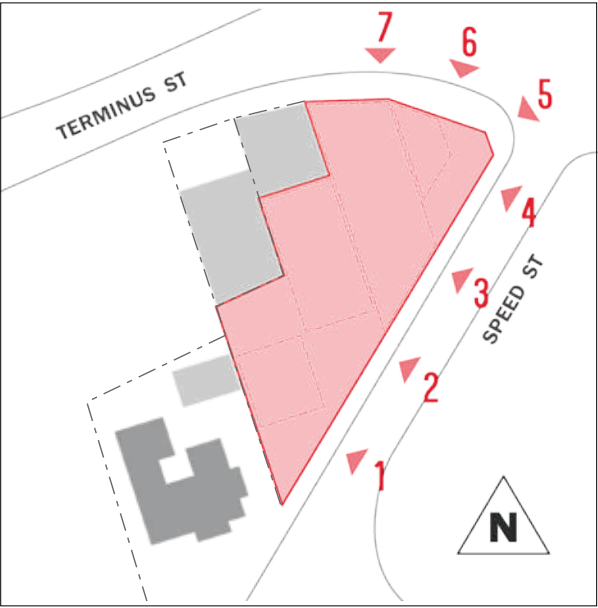
VIEWS 1-4 LOOKING WEST ALONG SPEED STREET AT SUBJECT SITE



VIEW 5 VIEW OF SUBJECT SITE FROM THE CORNER OF SPEED STREET & TERMINUS STREET



VIEW 6/7 LOOKING SOUTH ALONG TERMINUS STREET AT SUBJECT SITE



1.07_SURROUNDING STREET SETBACKS FROM LIVERPOOL DRAFT DCP 2008

The subject site has 2 street frontages at Speed Street which allows multiple entry for both pedestrian and vehicles. The frontage extends as long as 78 metres.

The street setback is 2.5 metres at this frontage that provide space for future pedestrian flow through this area.



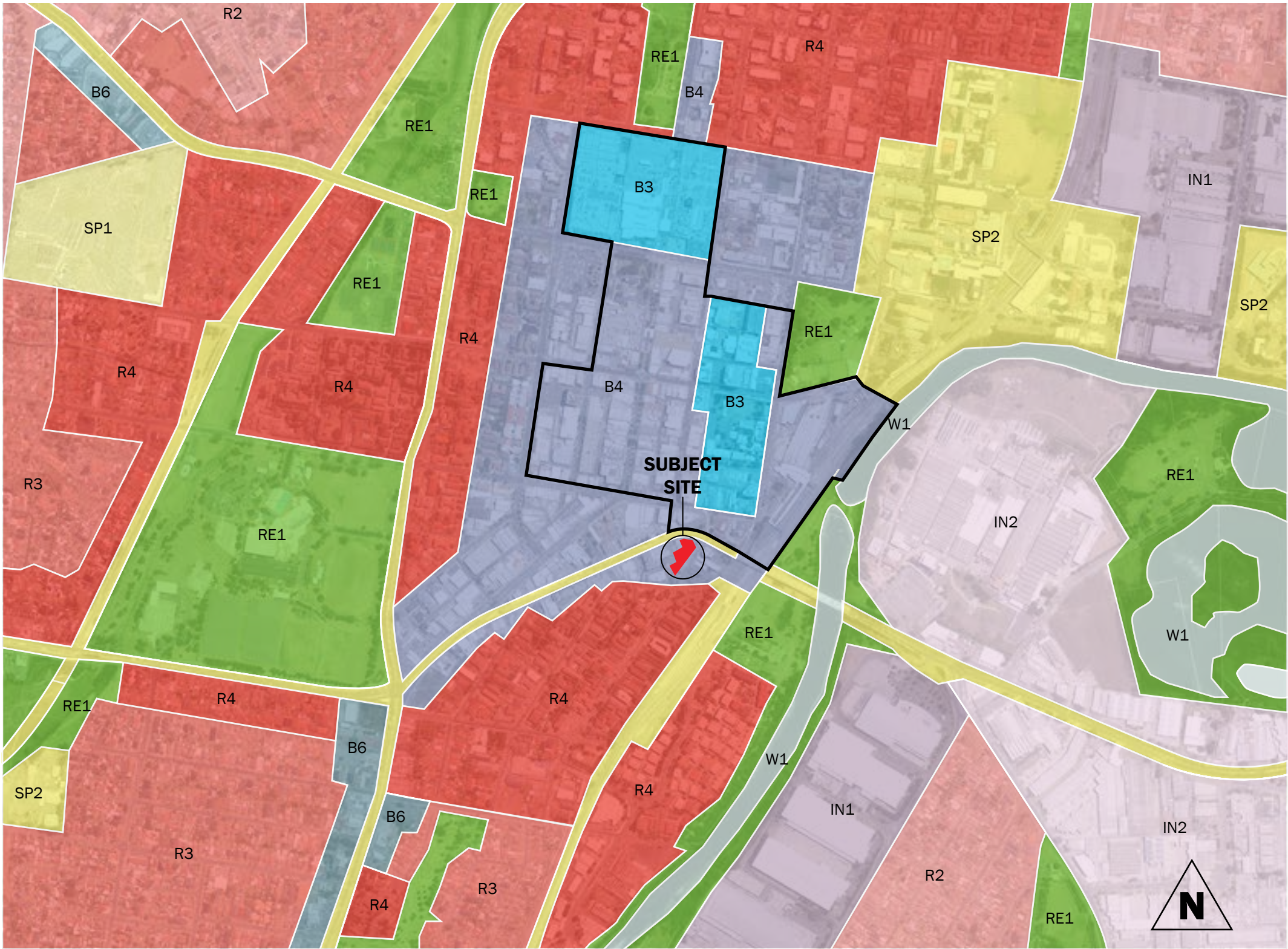
- SUBJECT SITE BOUNDARY
- 0m Setback
- 2.5m Setback
- 4.5m SetBack
- 5m Setback

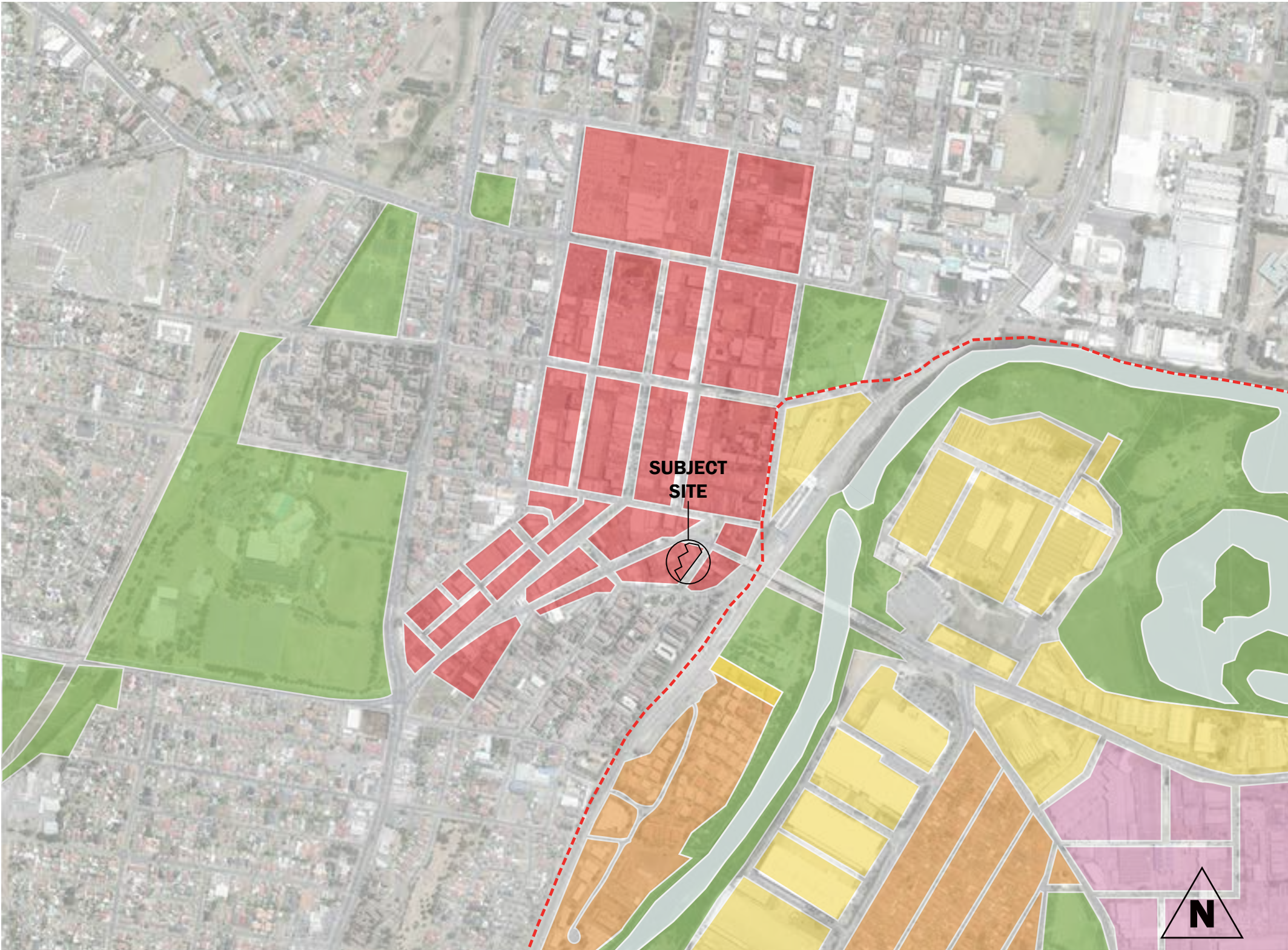
1.08_SITE ZONING CHANGES 1: 10 000

The subject site locates on the fringe of the Liverpool town centre which zoned as B4 Mixed use. To the south of the site is the R4 high density residential zoning; towards to the East is the Industrial zoning which generates employment opportunity; to the west is also B4 zoning follows by RE1 recreational area. And towards to the north is the CBD of the Liverpool which is divided into B3 Commercial centre and B4 Mixed use.

This zoning plan gives subject site a planning context to be developed as a Residentail-Commercial Mixed use with higher density what exists.

- AREA FORMERLY B3
- B3 COMMERCIAL CENTRE
- B4 MIXED USE
- B6 ENTERPRISE CORRIDOR
- IN1 GENERAL INDUSTRIAL
- IN 2 LIGHT INDUSTRIAL
- R2 LOW DENSITY RESIDENTIAL
- R3 MEDIUM DENSITY RESIDENTIAL
- R4 HIGH DENSITY RESIDENTIAL
- RE1 RECREATION
- SP1 SPECIAL ACTIVITIES
- SP2 INFRASTRUCTURE
- W1 NATURAL WATERWAYS



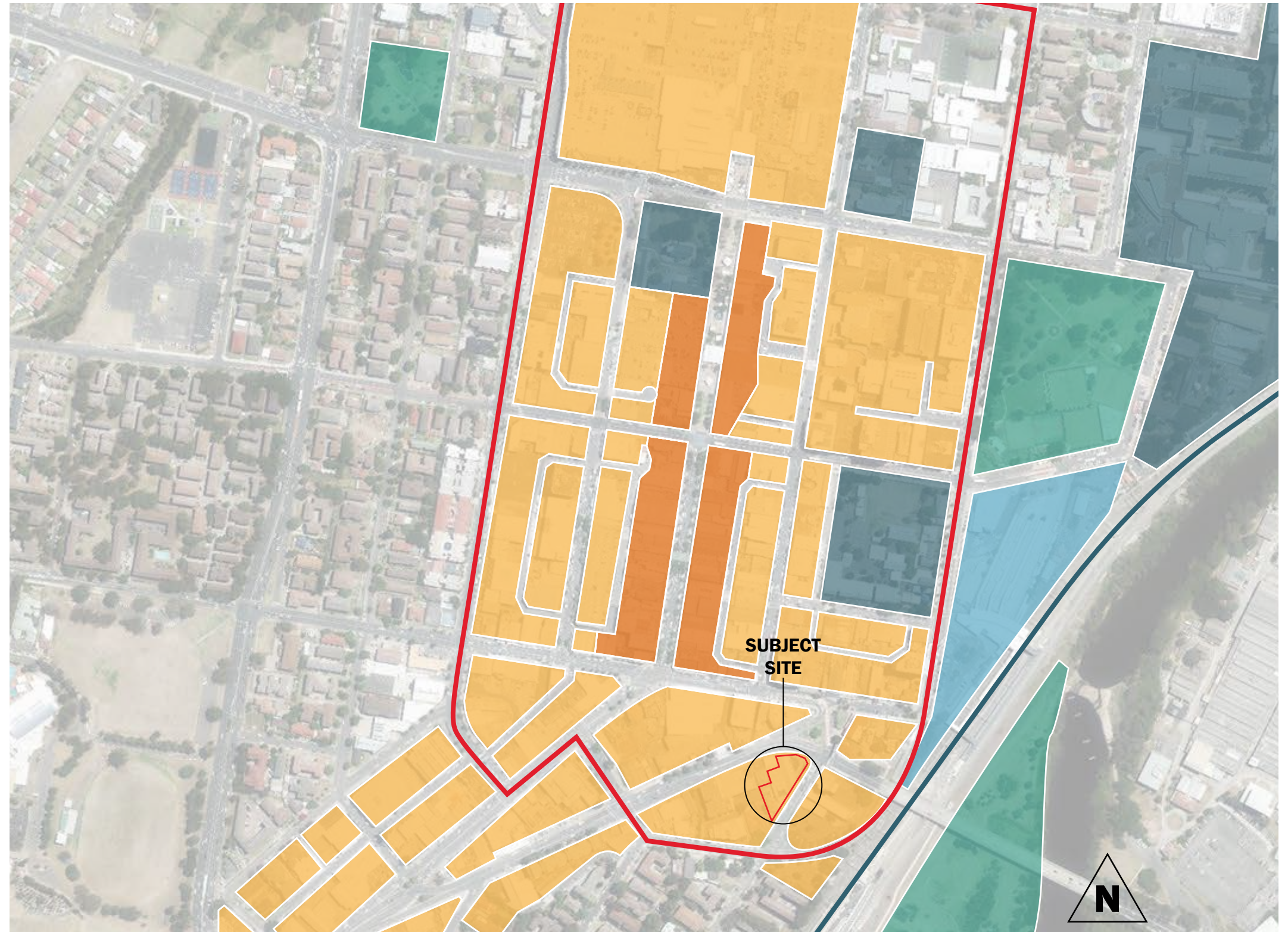


- STUDY AREA
- OPEN SPACE
- LIVERPOOL CBD
- MIXED USE
- RESIDENTIAL
- 'LIVE - WORK'

1.10_PRECINCT CHANGES 1:5 000

The Liverpool 2008 LEP amendment 52 has given a 'study area' which nominated the subject site as mid-rise area. And also allows higher density development to be delivered with certain conditions applied (called opportunity site).

The subject site satisfies the listed condition: 1. Site area larger than 1,500sqm; 2. Site has multiple street frontage; 3. Site can accomodate residential tower for 700 sqm floor plate; and it allows the subject site to be developed up to FSR 10 to 1.



- LIVERPOOL CBD RING ROAD
- LONG TERM KEY SITE
- MID RISE
- FINE GRAIN
- INSTITUTIONAL/PUBLIC BUILDING
- PARK/GREENSPACE
- TRAIN LINE

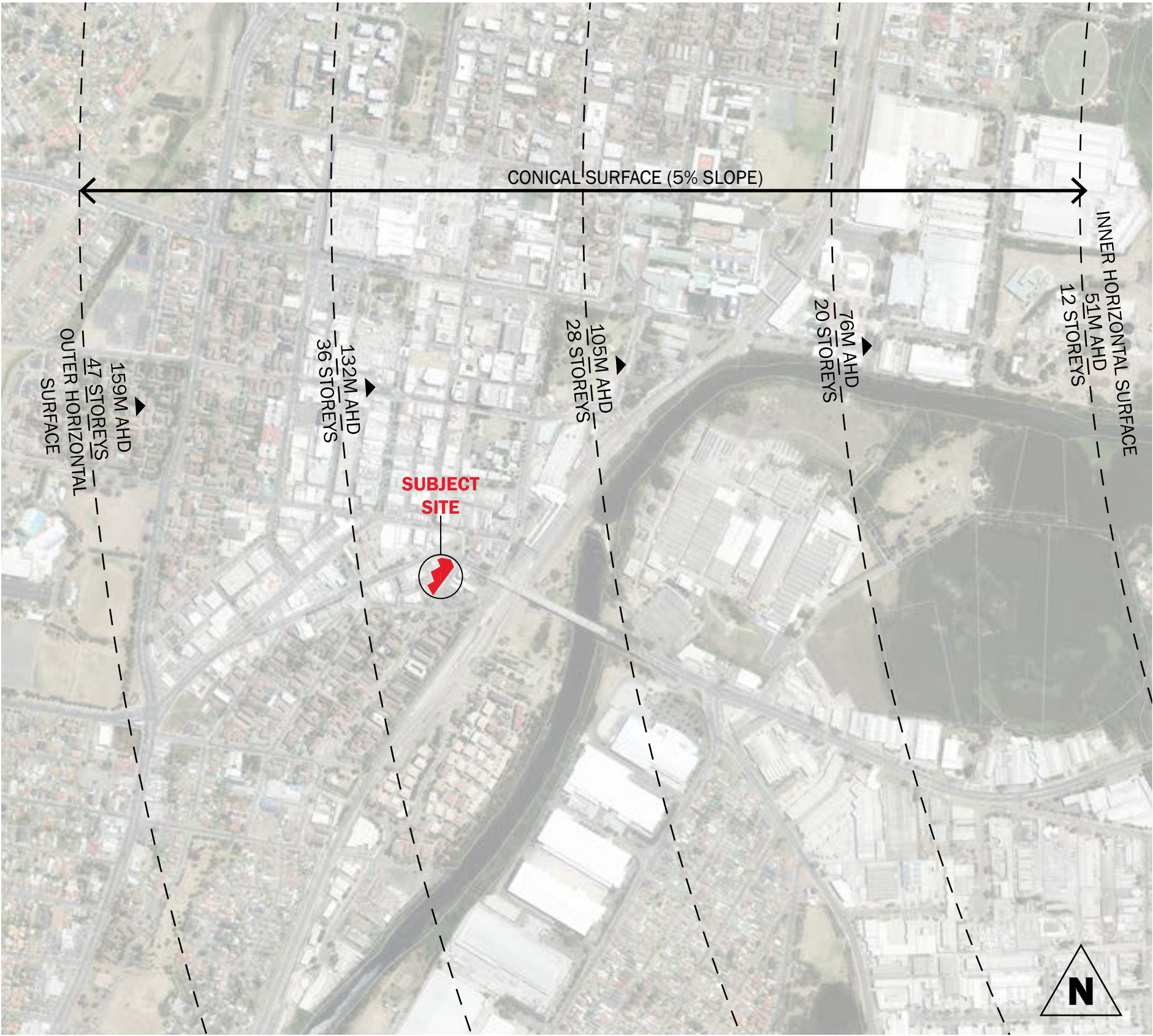
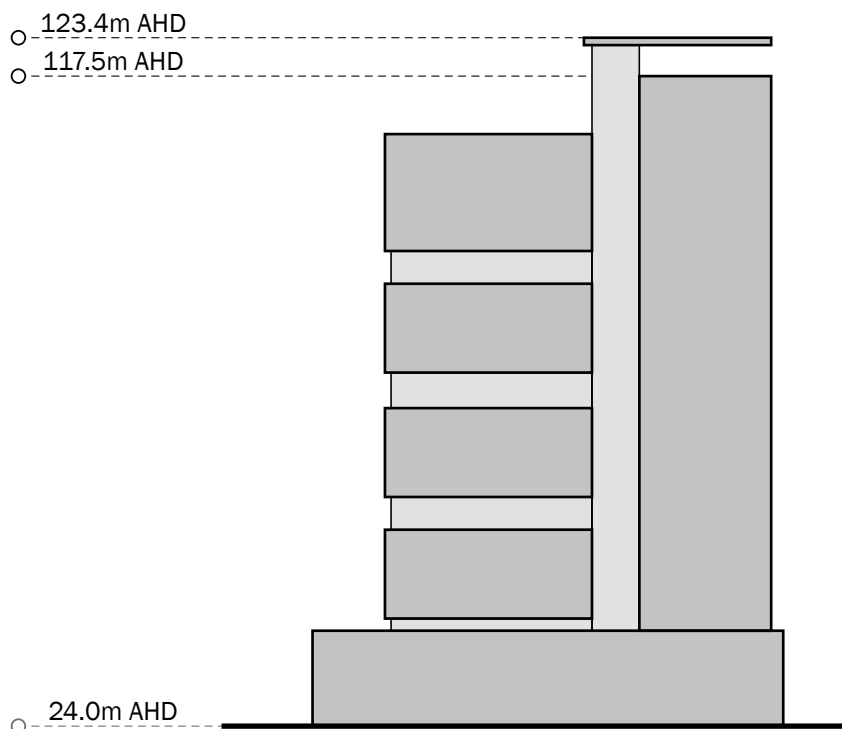
2.0 MASTER PLANNING

THIS SECTION CONSIDERS:

- 2.01_AVIATION HEIGHT LIMITS
- 2.02_ALTERNATIVE BUILD FORM
- 2.03_PRIMARY ENVELOPE (PODIUM)
- 2.04_PRIMARY ENVELOPE (TOWER)
- 2.05_BUILT FORM CRAFTING
- 2.06_MASSING STRATEGY
- 2.07_FEASIBILITY SECTION
- 2.08_SHARED OPEN SPACE
- 2.09_HERITAGE: DEL ROSA
- 2.10_POTENTIAL FUTURE CONNECTION
- 2.11_32-36 TERMINUS STREET

2.01_AVIATION HEIGHT LIMITS 1:10 000

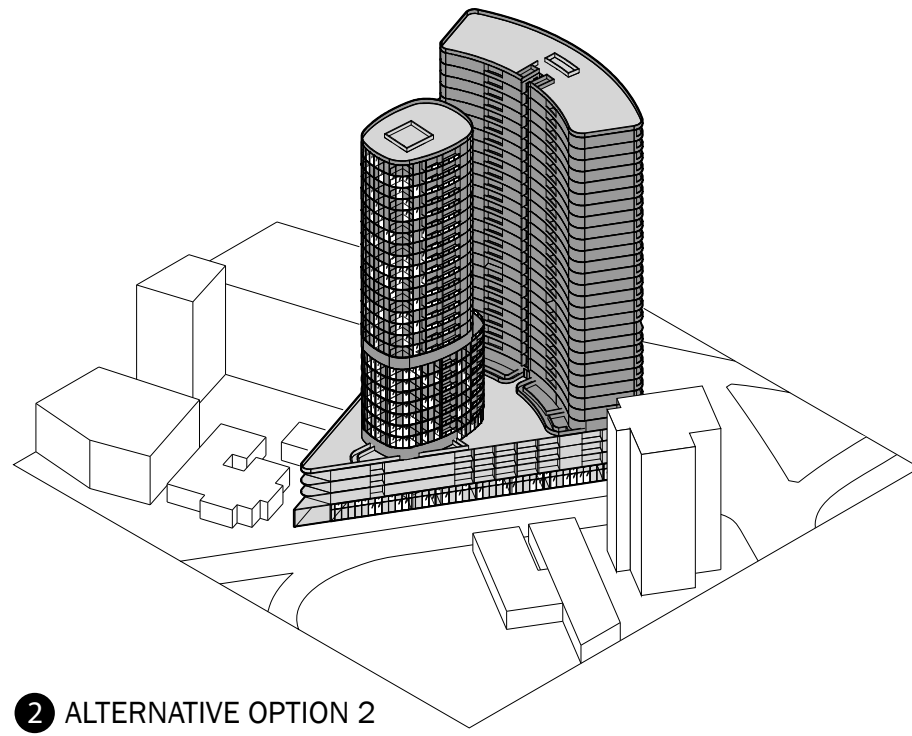
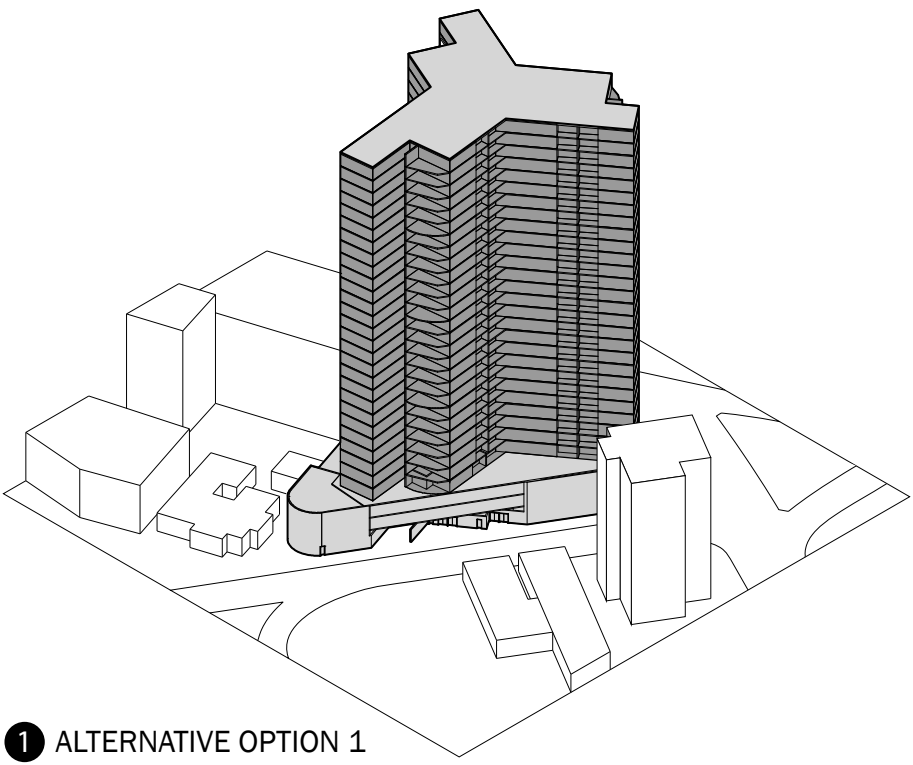
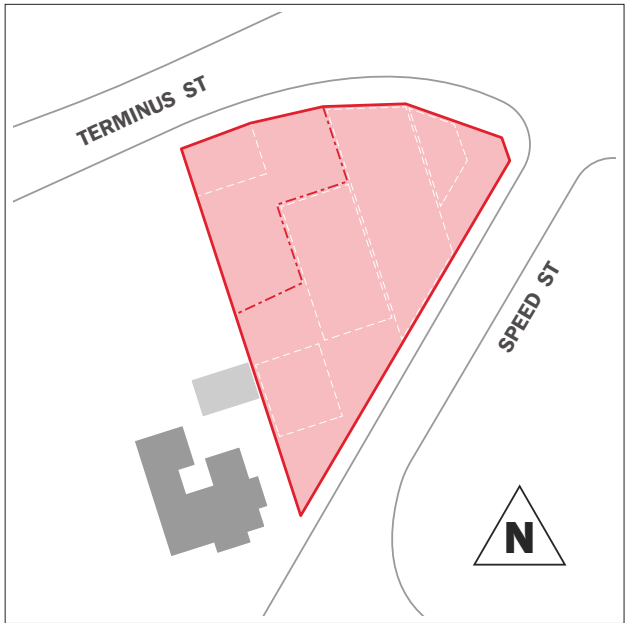
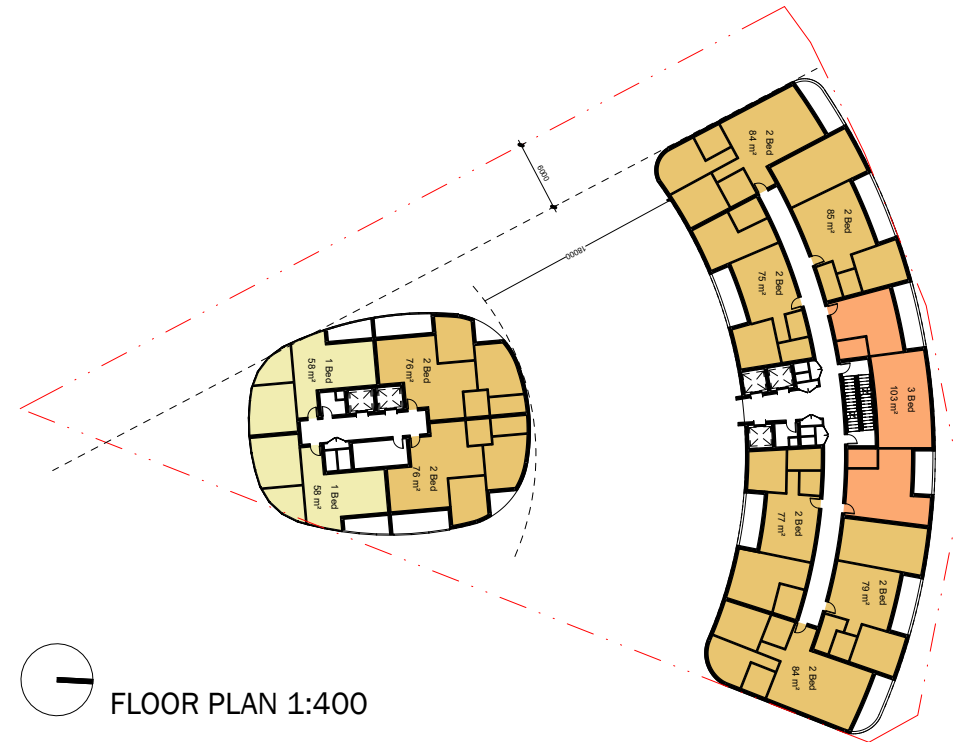
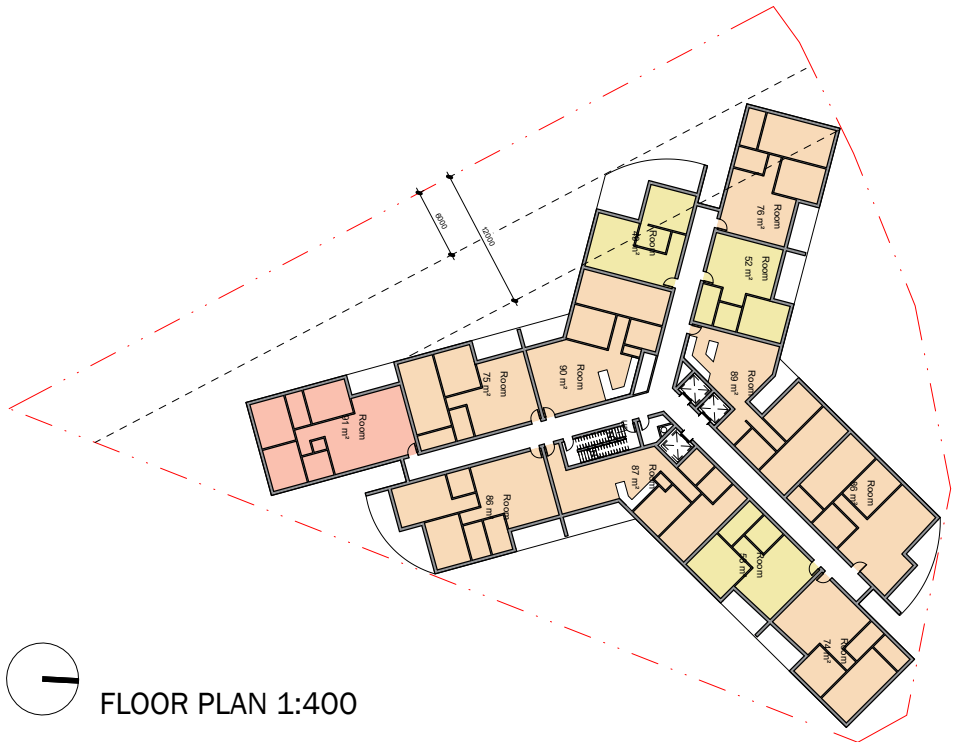
The subject site locates in the area under aviation height limits control under 132m AHD (36 storeys). The design is proposed to be 123.4m heigh with 30 storeys.



2.0_MASTER PLANNING

2.02_ALTERNATIVE BUILT FORM

There are 2 previous design options proposed to build on the site that includes 32-36 Terminus Street.



2.03_PRIMARY ENVELOPE (PODIUM) 1:500

According to Liverpool DCP Draft Plan_Part 4

- _ Section 2.5 _ Control 7
- _ Section 2.7 _ Control 1&2
- _ Section 2.8

Podium Footprint is shown on the indicative plan.

For all the boundaries abutting to other properties, zero setback has been applied. 2.5 meters setback from Speed Street boundary is applied to improve pedestrian accessibility on the foot path. The south corner of the podium has been setback further to minimise the visual impact to adjacent heritage item.



- SUBJECT SITE BOUNDARY
- REQUIRED SETBACK (PODIUM)
- PROPOSED SETBACK (PODIUM)
- ||||| BUILDING ENVELOPE BY PROPOSED SETBACK (PODIUM)



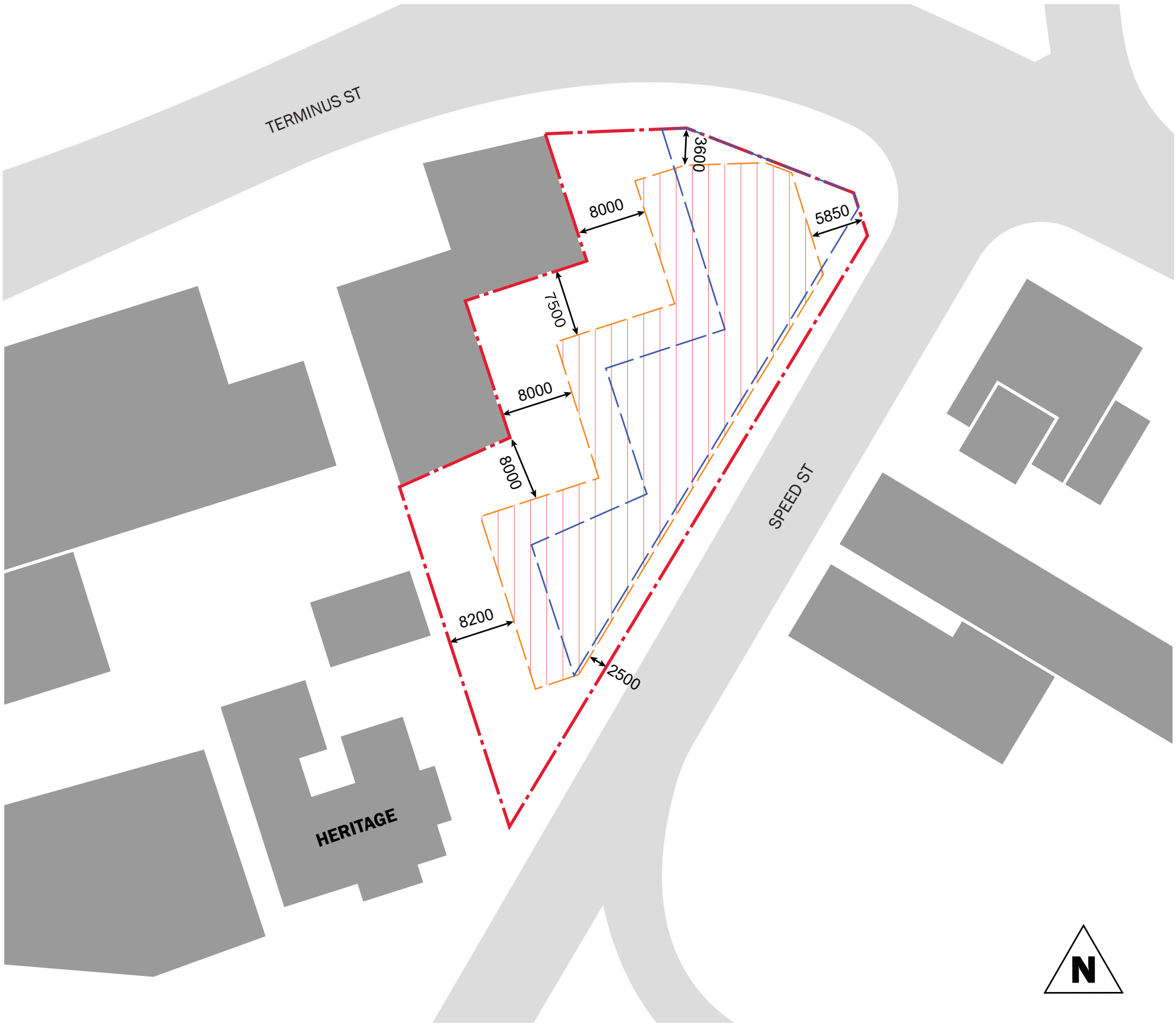
2.04_PRIMARY ENVELOPE (TOWER) 1:500

According to Liverpool DCP Draft Plan_Part 4

- _ Section 2.5 _ Control 7
- _ Section 2.7 _ Control 1&2
- _ Section 2.8

Tower Footprint is shown on the indicative plan.

For the West-South Facades, 7.5 - 8.2 meters setbacks are applied to satisfy general privacy & solar access requirements for residents. Further setback from North - East corner has been applied to allow more breathing space on this intersection of the streets.



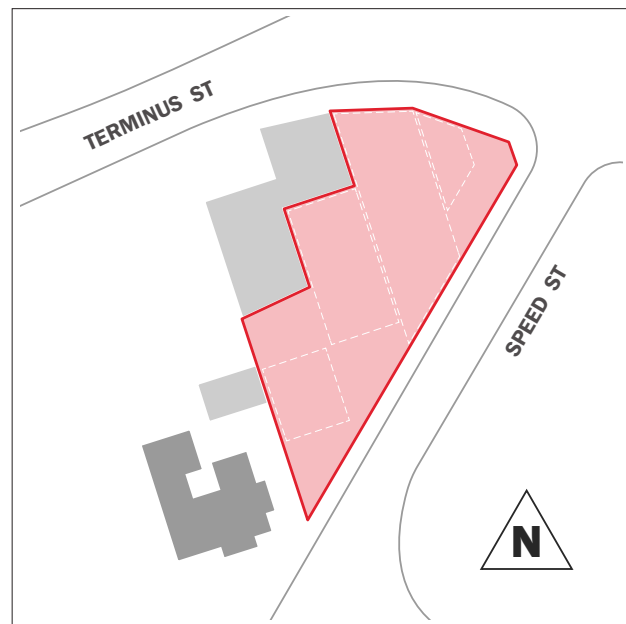
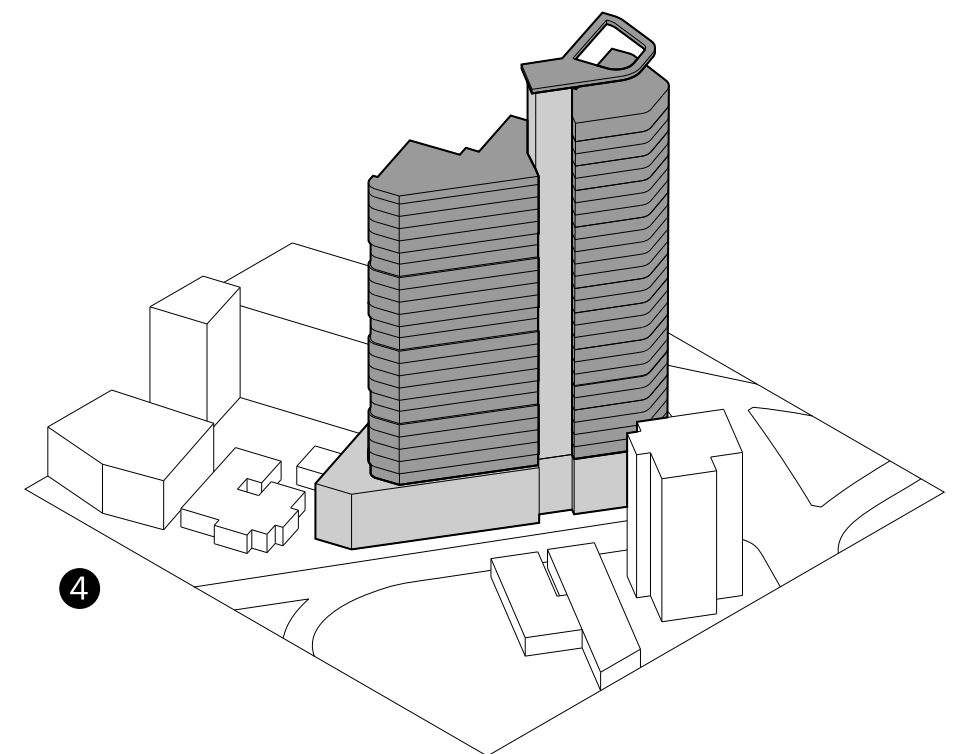
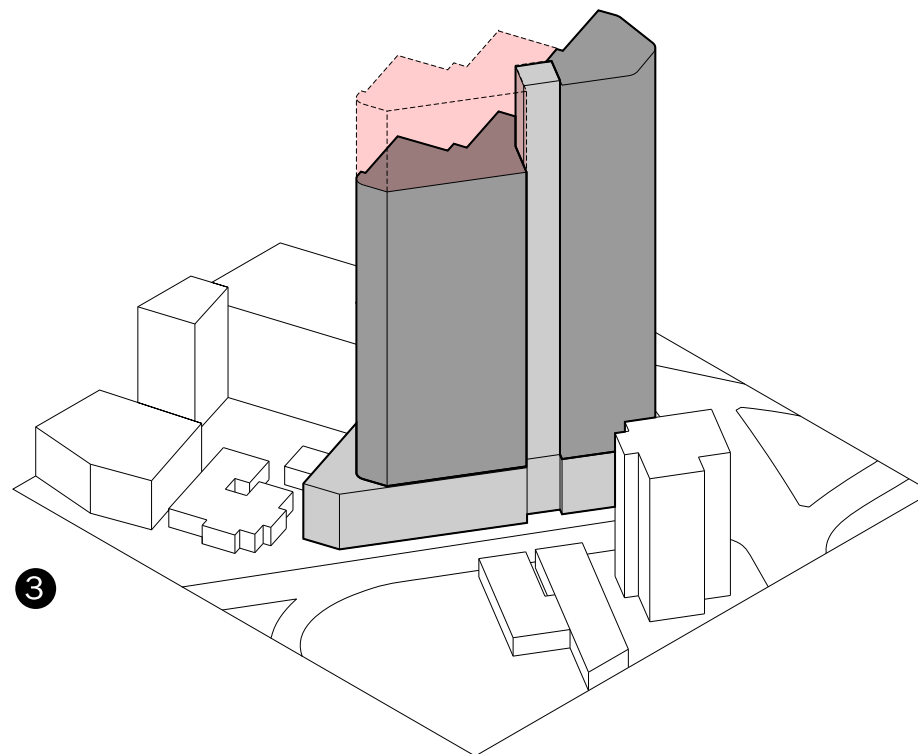
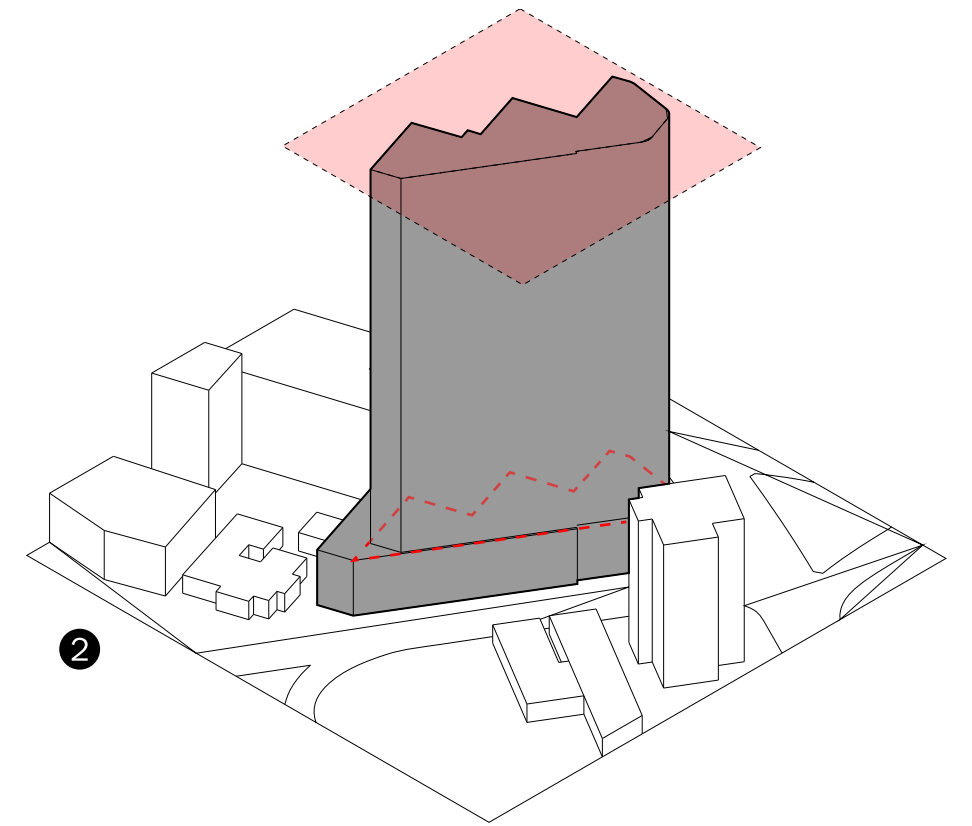
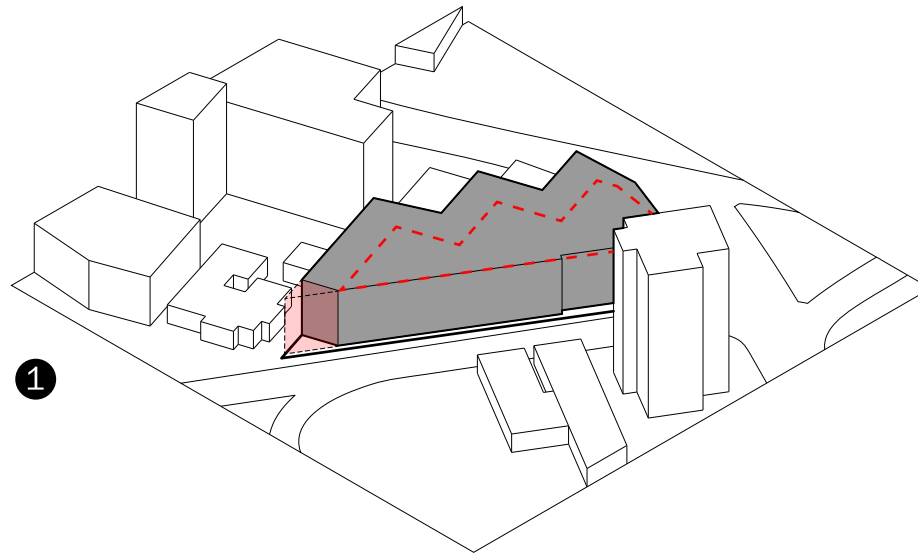
- SUBJECT SITE BOUNDARY
- REQUIRED SETBACK (TOWER)
- PROPOSED SETBACK (TOWER)
- ||||| BUILDING ENVELOPE BY PROPOSED SETBACK (TOWER)

2.05_BUILT FORM CRAFTING

The design proposal comes from site envelope and site setback requirement. It aims to fulfill largest possible space utility to increase the yield. The design is the combination with the tower for residential units and the podium for car park, retailing, communal space as well as public service.

The design follows tower + podium configuration to strengthen the street corner edge with 4 podium levels. The tower has been setback further to allow the separations for residential use.

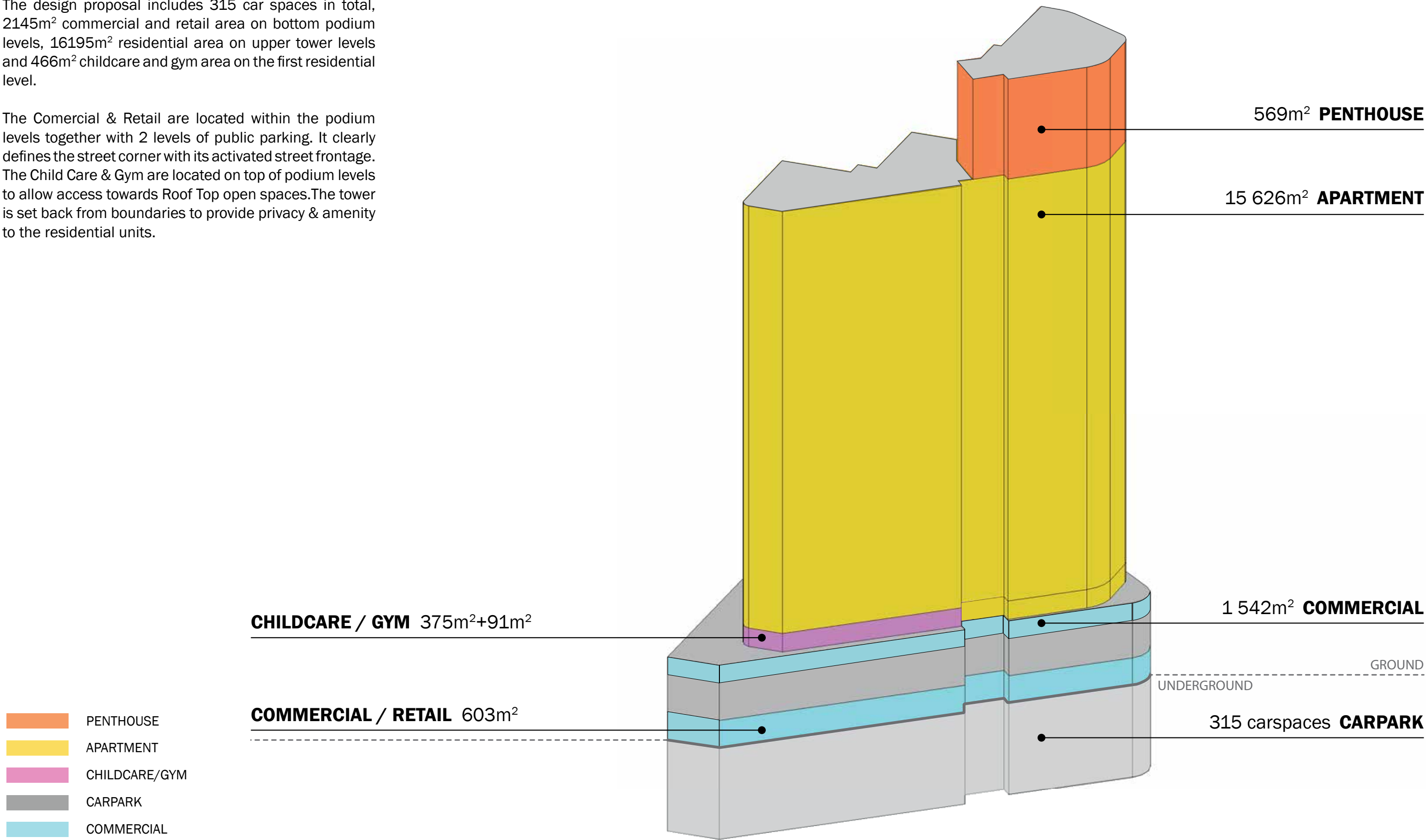
The north side of tower has been raised to emphasize the corner of the street. And the East Facade is divided into two parts to minimise the bulky look from street.



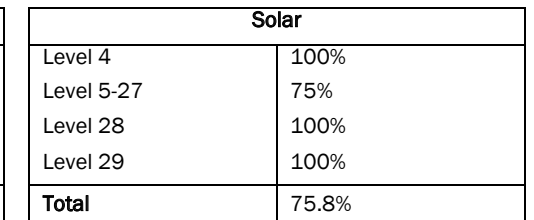
2.06_MASSING STRATEGY

The design proposal includes 315 car spaces in total, 2145m² commercial and retail area on bottom podium levels, 16195m² residential area on upper tower levels and 466m² childcare and gym area on the first residential level.

The Comercial & Retail are located within the podium levels together with 2 levels of public parking. It clearly defines the street corner with its activated street frontage. The Child Care & Gym are located on top of podium levels to allow access towards Roof Top open spaces.The tower is set back from boundaries to provide privacy & amenity to the residential units.



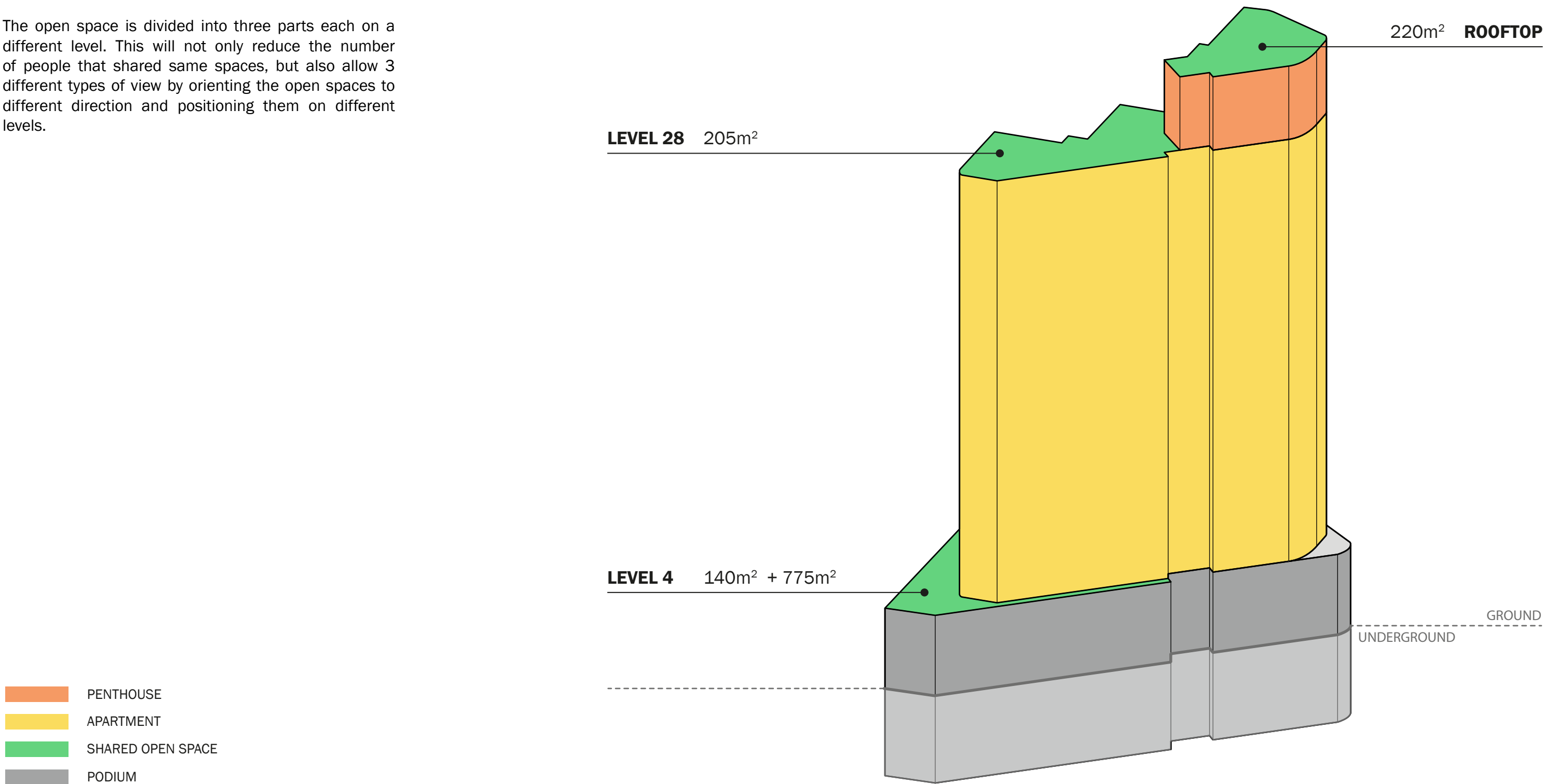
2.07_FEASIBILITY SCHEDULE



2.08_SHARED OPEN SPACE

The design proposal includes shared open space on the top of the podium (140m² & 775m²) and the top of the tower (205m² & 220m²). The communal area helps to optimize the living environment of the residential area serving as high density dwellings.

The open space is divided into three parts each on a different level. This will not only reduce the number of people that shared same spaces, but also allow 3 different types of view by orienting the open spaces to different direction and positioning them on different levels.



2.0_MASTER PLANNING

2.09_HERITAGE: DEL ROSA



PROPOSED DEVELOPMENT (THIS IMAGE IS ARTISTIC EXPRESSION ONLY, FACADE DESIGN REFER TO ARCHITECTURAL DRAWINGS)



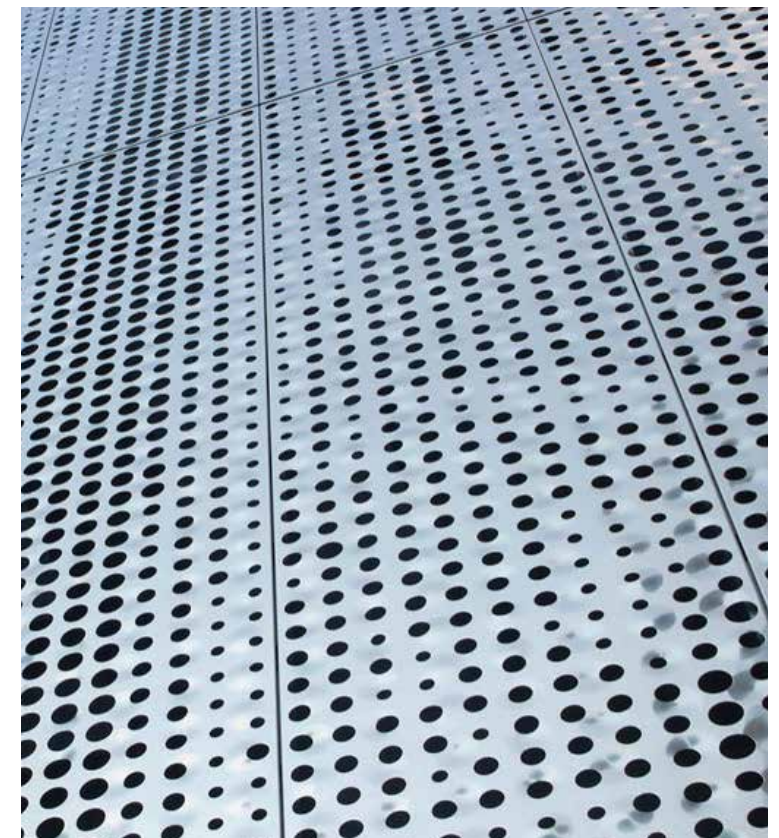
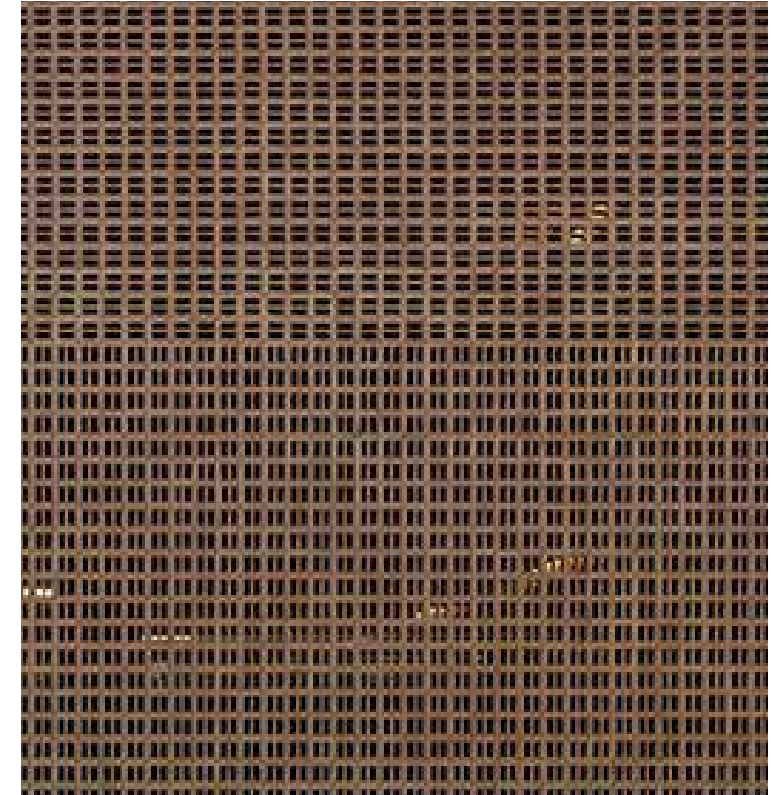
DEL ROSA - 7 SPEED ST

ITEM 106

2.09_HERITAGE: DEL ROSA

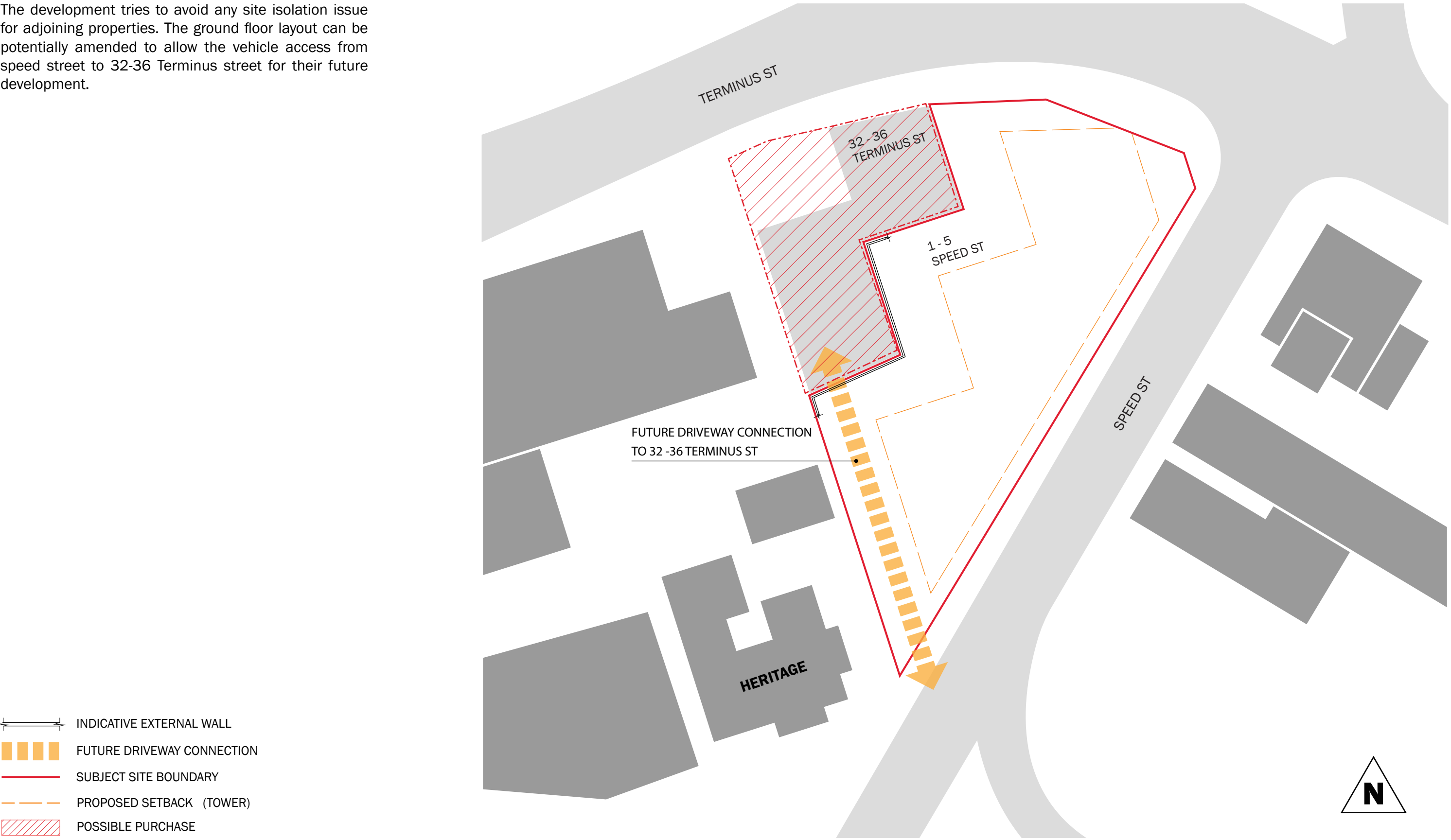
The development has been designed over several years with concern for how to respond to the adjacent heritage item and the desired future character of the area in the planning documentation.

The decision to pull the building back from the south-west corner of the site exposes the heritage item to its most important public views. The podium design with its muted colour palette would allow the decorated white walls of the heritage item to stand in distinction from plainer surfaces, while the selected red-brown brick of the proposed podium is intended to be visually linked with the roof tile colour of the heritage item.



2.10 POTENTIAL FUTURE CONNECTION

The development tries to avoid any site isolation issue for adjoining properties. The ground floor layout can be potentially amended to allow the vehicle access from speed street to 32-36 Terminus street for their future development.



- INDICATIVE EXTERNAL WALL
- FUTURE DRIVEWAY CONNECTION
- SUBJECT SITE BOUNDARY
- PROPOSED SETBACK (TOWER)
- POSSIBLE PURCHASE

2.11_ 32-36 TERMINUS STREET

For 32-36 Terminus street:

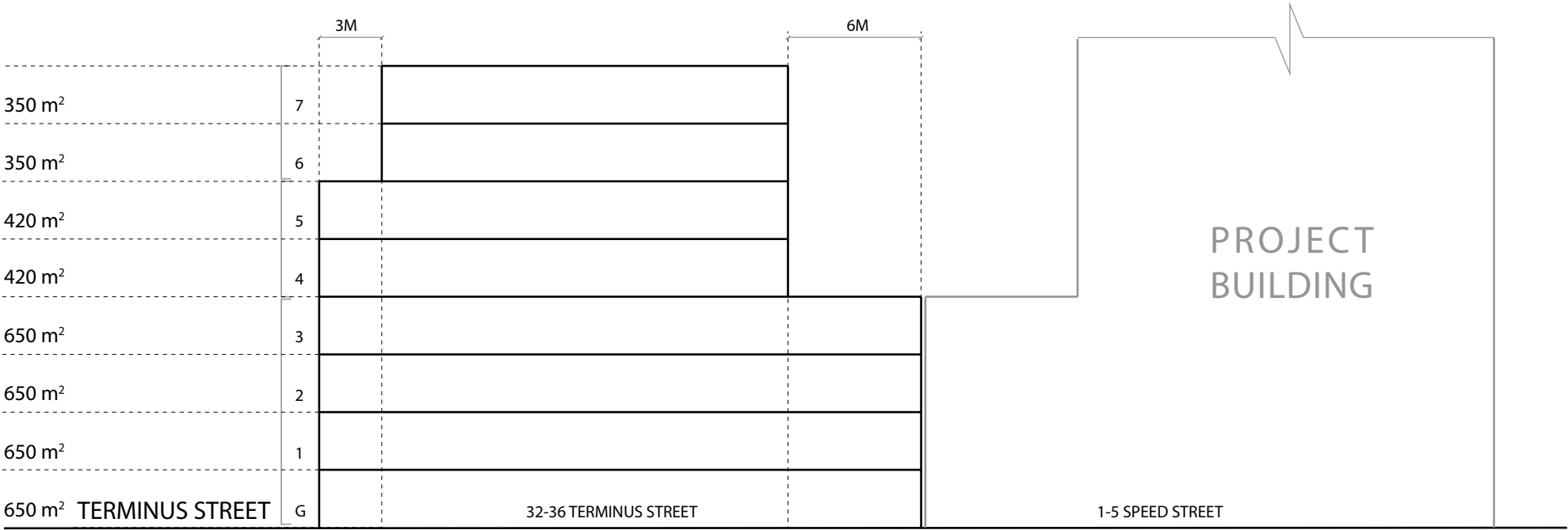
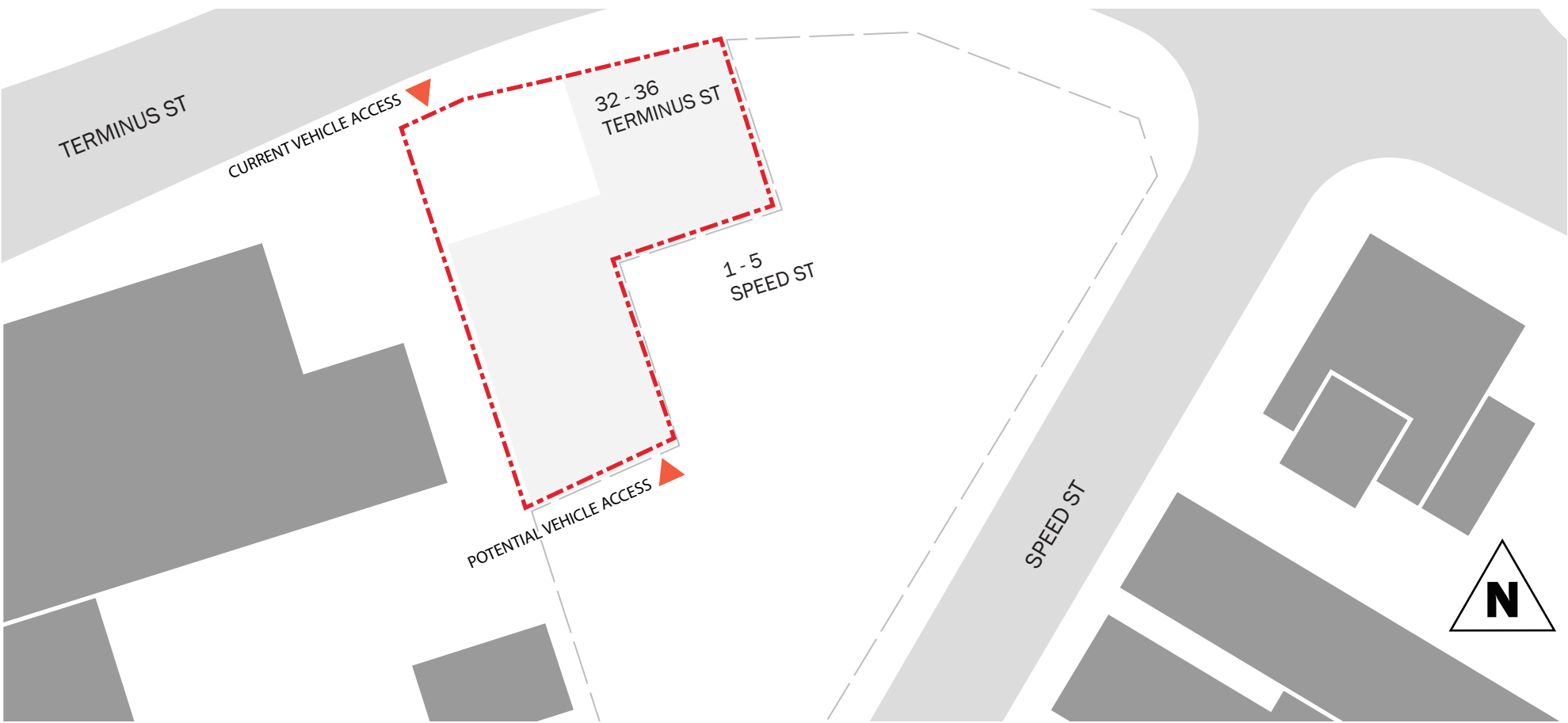
Site Area: 687sqm
FSR: 3.0-5.0 (According to LEP Amendment 52)
HOB: 28m – 8 Storey (According to LEP Amendment 52)
Zoning: B4
Street Front Setback: 3 meters from 6th storey
Rear setback: 6 meters from 4th storey

Permitted development:

Boarding houses; Building identification signs; Business identification signs; Car parks; Child care centres; Commercial premises; Community facilities; Depots; Educational establishments; Entertainment facilities; Environmental facilities; Environmental protection works; Flood mitigation works; Function centres; Helipads; Home businesses; Home industries; Hostels; Hotel or motel accommodation; Information and education facilities; Medical centres; Multi dwelling housing; Passenger transport facilities; Places of public worship; Public administration buildings; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Registered clubs; Residential flat buildings; Respite day care centres; Restricted premises; Roads; Seniors housing; Service stations; Shop top housing; Tourist and visitor accommodation; Vehicle repair stations; Veterinary hospitals; Water recreation structures.

According to Liverpool DCP 2008 Part 4:
Development in City Centre Draft

Total GFA within Envelope: $650 \times 4 + 420 \times 2 + 350 \times 2 = 4140 \text{ m}^2$
Equal to FSR $6:1 > 5:1 > 3:1$



3.0 DESIGN EVOLUTION & RESPONSE

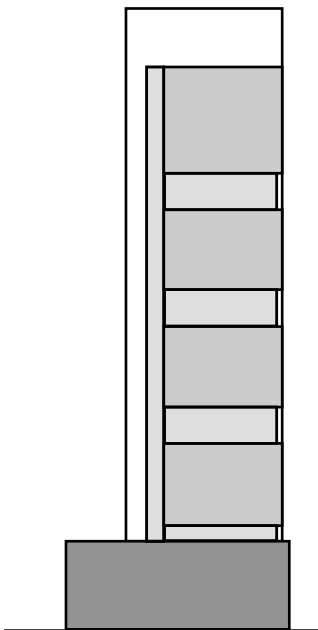
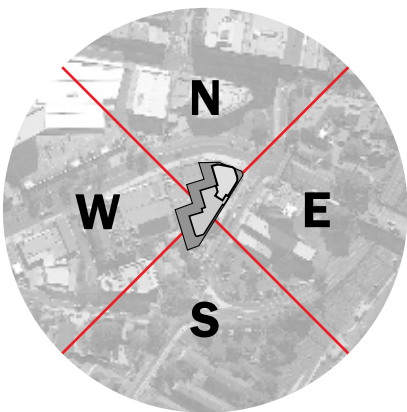
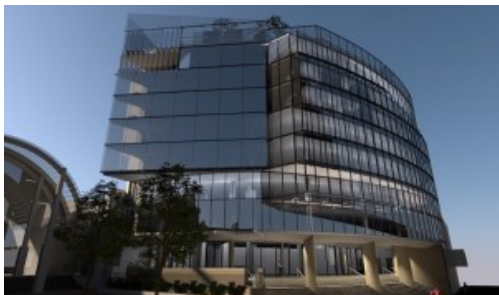
THIS SECTION CONSIDERS:

- 3.01_GENERAL MASSING
- 3.02_FACADE DESIGN
- 3.03_FACADE TYPOLOGY

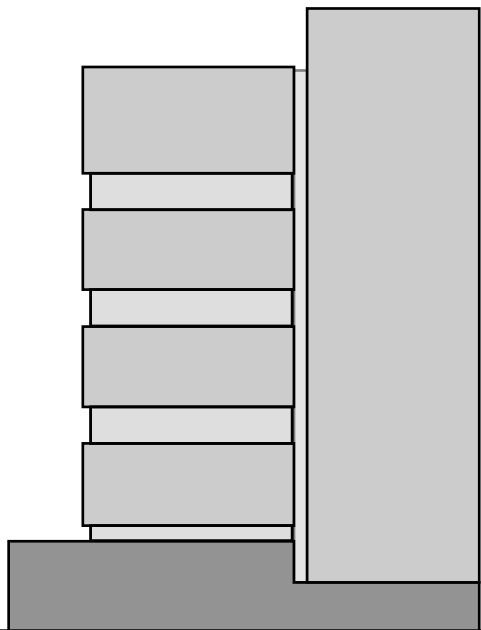
3.01_GENERAL MASSING

The subject site is located on the edge of the CBD B4 zoning. The adjacent zoning is the R4 high density residential, which currently has been developed with 4-5 storey perimeter blocks or liner blocks finished in face bricks. The new DPC for the CBD area shows that to the north west of the subject site will be developed with high-rise towers.

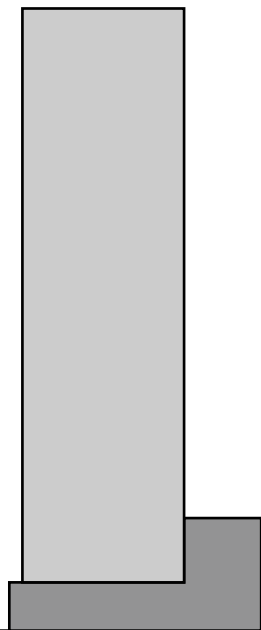
As the subject site is on the transition area of ‘Mid-rise apartments’ towards to ‘High-rise towers for mixed-use & residential’. The building design reflects this transition in the building height and façade configuration. On the North & west façade, it reflects its ‘high-rise, CBD characteristics’ by emphasizing the vertical elements on the façade design. On the east & south façade, it utilizes smaller scale rectangular blocks to reflect the mid-rise residential scale.



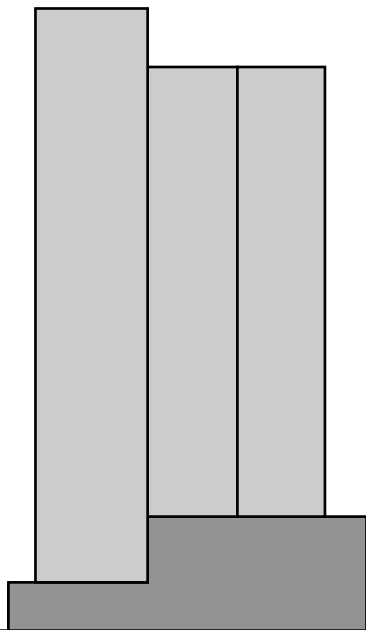
SOUTH



EAST



NORTH



WEST

3.0_DESIGN EVOLUTION & RESPONSE

3.02_FACADE DESIGN

Street Level – A vibrant Retail Precinct would provide attraction to pedestrian travels between Liverpool station and the surrounding neighbourhood. The retail level's metal canopy (glass canopy) will provide weather protection and limit the passage of noise at street level reaching the residents on the levels above.

Podium Level – The podium includes ground level retail/business units, level 1 & 2 public car parking and third level commercial units. The design utilizes horizontal louvers for all levels to blend the parking levels into podium façade. The mostly solid walls are finished with face bricks to respond to the roof tile colour and fine-grain appearance of the heritage item at 7 Speed Street. The 50-65% visual permeability of the podium walls towards the street allows natural light to penetrate through the car park level to minimise the use of artificial lights during the day. It also provides natural ventilation into the car park spaces. It is intended to imprint the image of trees in a perforated metal panel on the middle section of the podium façade with a low reflectivity to provide street-level visual interest to pedestrians, break the continuity of horizontal lines, and in so doing, break down the scale of building elements that are prominent to pedestrians in the public domain nearby.

'North' Tower Design – the façades of the tower are to be constructed by glass curtain-wall panels to maximise the view from the apartments. Feature horizontal louvers (fins) are to be installed between levels to provide shading and privacy. The feature fins are staggered to articulate the facade. On the top of the tower is the ring shaped architectural feature that holds the shading louvers for roof top garden. This feature is designed to respond to the need for visual interest in a building with a landmark scale. This 'crown' can be treated with Alucobond or similar semi-gloss materials.

'South' Tower Design – In order to break down the sense of scale of the development, our secondary tower design has been treated with a different material colour palette to separate it from the premier tower. The second tower has been articulated into four sections, each section has 4 levels of residential apartments. The tower façade is treated with white and grey painted panels, exterior timber look ceramic tiles, glass curtain-wall panels and brick colour perforated metal panels. Our façade proposal is intended to respect Liverpool's heritage building at the west side of the secondary tower. Red-brown brick will match the roof tile colour of the heritage item; this will be used to construct our rear podium level with an extruded brick pattern to use a traditional material in a contemporary manner. On the top of the podium level, we are proposing a community childcare centre. A planter box will be constructed around the periphery to discourage the noise from the street and to soften the appearance of the building in more distant views.



3.03_FACADE TYPOLOGY

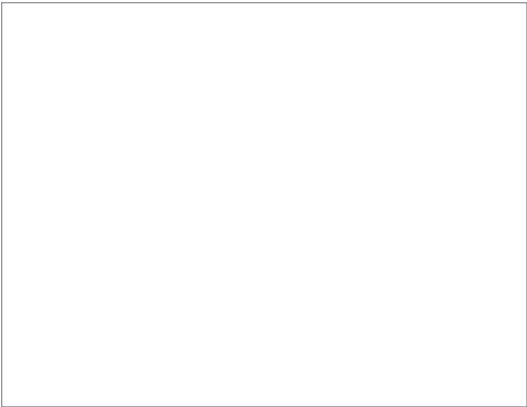


4.0 MATERIAL SCHEDULES

-
- THIS SECTION CONSIDERS:
- 4.01_MATERIAL SCHEDULE
- 4.02_PODIUM LEVEL CAR PARKS
- 4.03_PEDESTRIAN/COMMERCIAL LEVEL
- 4.04_SHARED OPEN SPACE/PRECEDENTS

4.0_MATERIAL SCHEDULES

4.01_MATERIAL SCHEDULE



PAINT FINISH



PAINT FINISH



GLASS CURTAIN WALL/ BALUSTRADE



METAL SCREEN FOR PODIUM CAR PARK



TIMBER LIKE EXTERIOR CLADDING



CHARCOAL WINDOW/ DOOR TRIM LINE



ALUCOBOND FEATURE CLADDING



BRICK FINISH TOWARDS HERITAGE

4.0_MATERIAL SCHEDULES

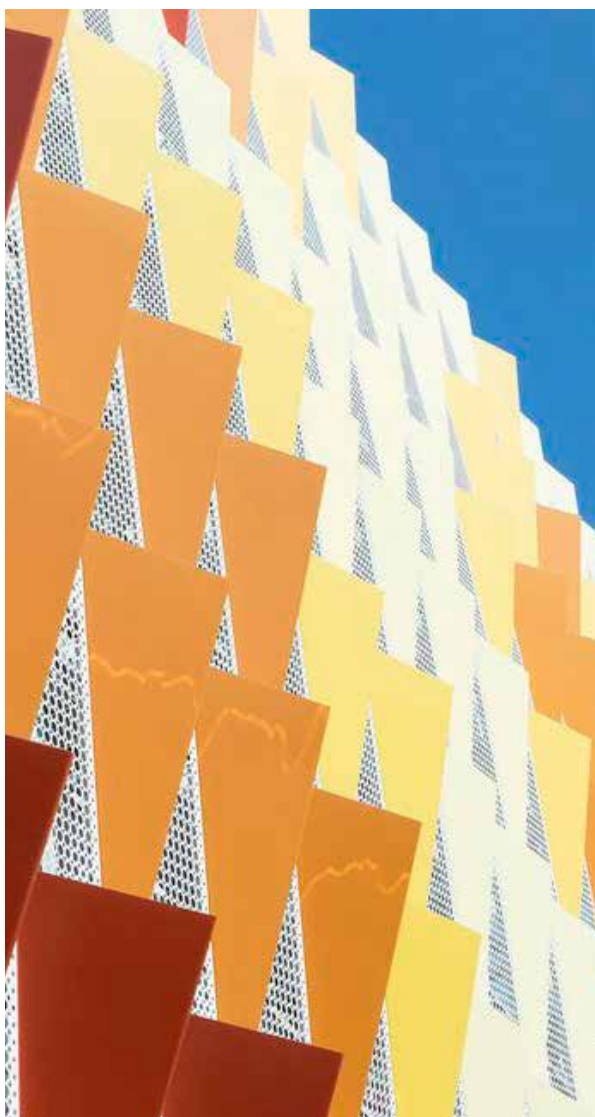
4.02_PODIUM LEVEL CAR PARKS



BRICK SCREEN



METAL BATTEN



METAL PANEL



METAL PANEL



METAL MESH SCREEN



METAL BATTEN



METAL MESH SCREEN



METAL BATTEN

4.03_RESIDENTIAL/COMMERCIAL LEVEL



PRINTED PERFORATED METAL PANEL



EXPANDED METAL PANEL



GLASS CURTAIN WALL FOR COMMERCIAL LEVEL



PODIUM CANOPY TO ENCOURAGE PEDESTRIAN



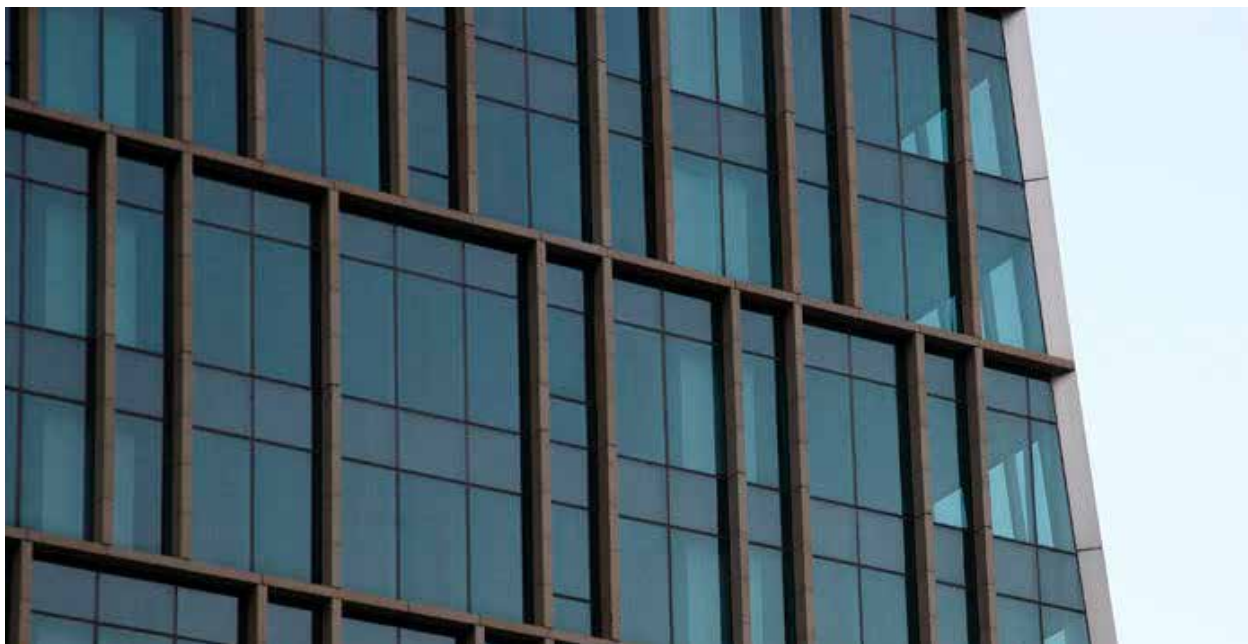
STEEL LOUVERS



BRICK SCREEN



GLASS CURTAIN WALL FOR COMMERCIAL LEVEL



GLASS CURTAIN WALL + BRICK LINING

4.0_MATERIAL SCHEDULES

4.04_SHARED OPEN SPACE / PRECEDENTS GYM AND ROOFTOP COMMUNAL SPACE

