

ARCHITECTURAL DESIGN STATEMENT

TOWER B – HOSPITAL, ACCOMMODATION & ANCILLARY FACILITIES

CONCEPT PROPOSAL (SSD 8499)

At:

12 Frederick Street, St Leonards. NSW

for:

dexus

date:

27/06/17

Issue:

ISSUE 3

DC8STUDIO

dc8 studio (nsw)
a. bay 9 level 1, 9 middlemiss steet
lavender bay nsw 2060
p. 02 9003 0633 e.info@dc8studio.com

dc8 studio (qld)
a. 30 commercial road newstead qld 4006
p. 07 3252 1188 e.info@dc8studio.com

w. www.dc8studio.com ACN 613 313 009

TABLE OF CONTENTS

1.0 INTRODUCTION

2.0 SITE AND SURROUNDING LOCALITY

- 2.01 URBAN CONTEXT
- 2.02 ROYAL NORTH SHORE HOSPITAL PRECINCT
- 2.03 TRANSPORT CONTEXT
- 2.04 SITE ANALYSIS
- 2.05 TOPOGAPHY AND STREETScape
- 2.06 INDICATIVE USE

3.0 DESIGN PRINCIPLES

- 3.01 SITE LAYOUT AND BUILDING FOOTPRINT
- 3.02 GFA
- 3.03 BUILDING HEIGHT
- 3.04 BUILDING MASSING
- 3.05 SITE ACCESS, LANDSCAPING + TREE PLANTING
- 3.06 THE PROPOSED ENVELOPE
- 3.07 INDICATIVE FAÇADE ARTICULATION & MATERIALITY
- 3.08 SOLAR ACCESS AND SHADOW ANALYSIS
- 3.09 VISUAL IMPACT, VIEWS AND PRIVACY
- 3.10 WIND & ACOUSTIC IMPACT
- 3.11 CARPARKING

4.0 SUMMARY

1.0

INTRODUCTION

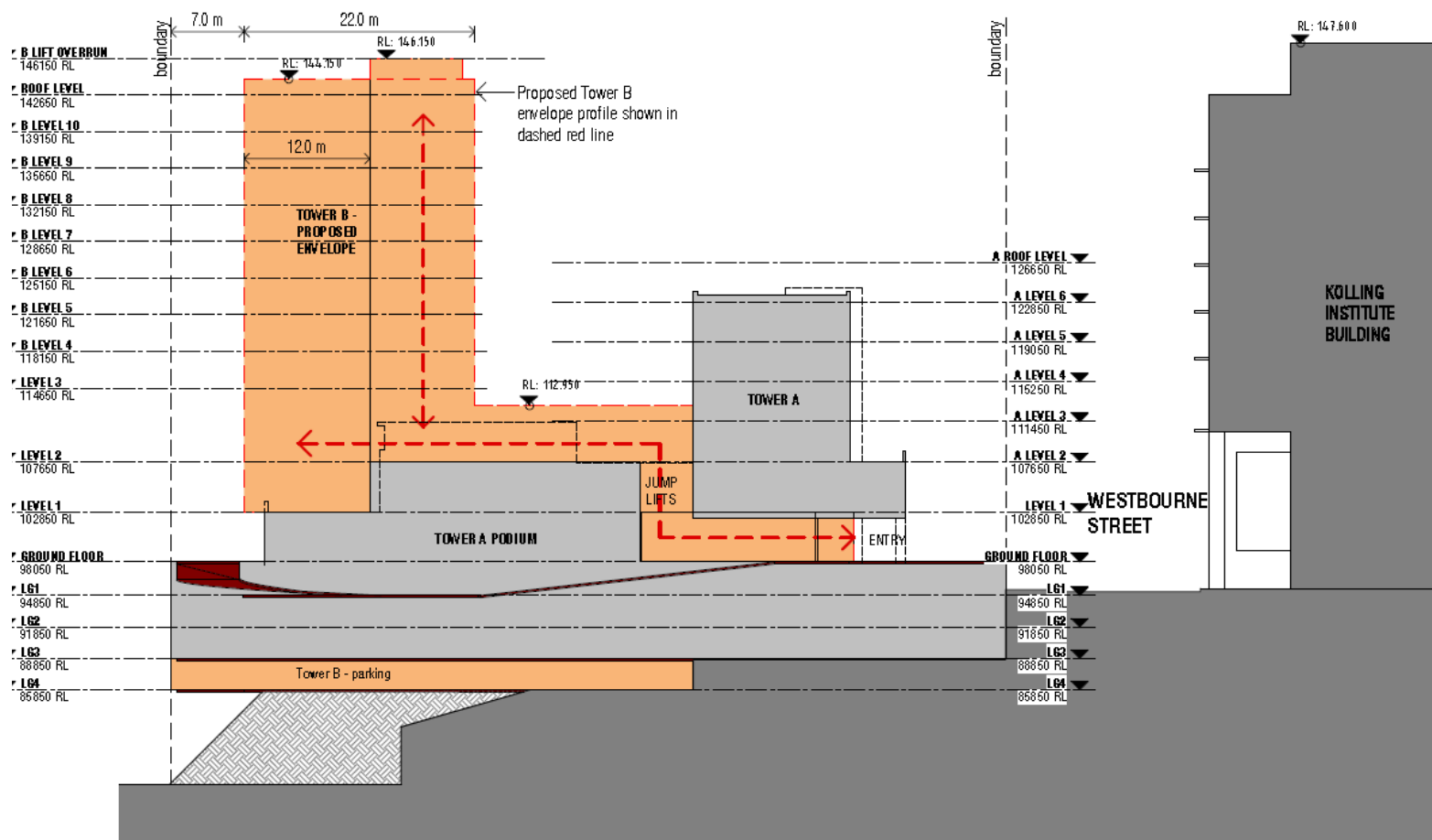
This Architectural Design Statement informs the Concept Proposal for the development of hospital, accommodation and ancillary facilities, associated with the proposed private hospital at 12 Frederick Street, St Leonards.

The Concept Proposal relates to a new building envelope (referred to as “Tower B”) on the podium of the proposed private hospital (referred to as “Tower A and Podium” and subject to separate DA SSD7543)

It also includes uses associated with the proposed private hospital, including (but not necessarily limited to):

- medical consulting rooms
- operating and procedure rooms
- accommodation rooms consisting of post-natal suites, health care worker, patient and visitor accommodation education and conference meeting rooms gymnasium
- additional car parking in the basement car park of the private hospital

Tower B will form the extension of an existing health precinct of the Royal North Shore Hospital.



Site Section

LEGEND

-  TOWER B (Proposed Envelope)
-  TOWER A + PODIUM (Subject to separate DA SSD 7543)

2.0 SITE AND SURROUNDING LOCALITY

The site is located on the corner of Reserve Road and Westbourne Street, St Leonards, in the Willoughby Local Government Area (LGA).

This site is part of larger 2.6-hectare site, known as 12 Frederick Street, St Leonards. The site is described as Lot 1 in DP 591747 and is bounded by Frederick Street to the north, Reserve Road to the west, Westbourne Street to the south and mixed warehousing and related development to the east. The area of the subject site is of 6,194 m².

The site is located opposite the existing North Shore Private Hospital to the west and the Kolling Institute Building to the south.



Figure 1 - Locality Plan

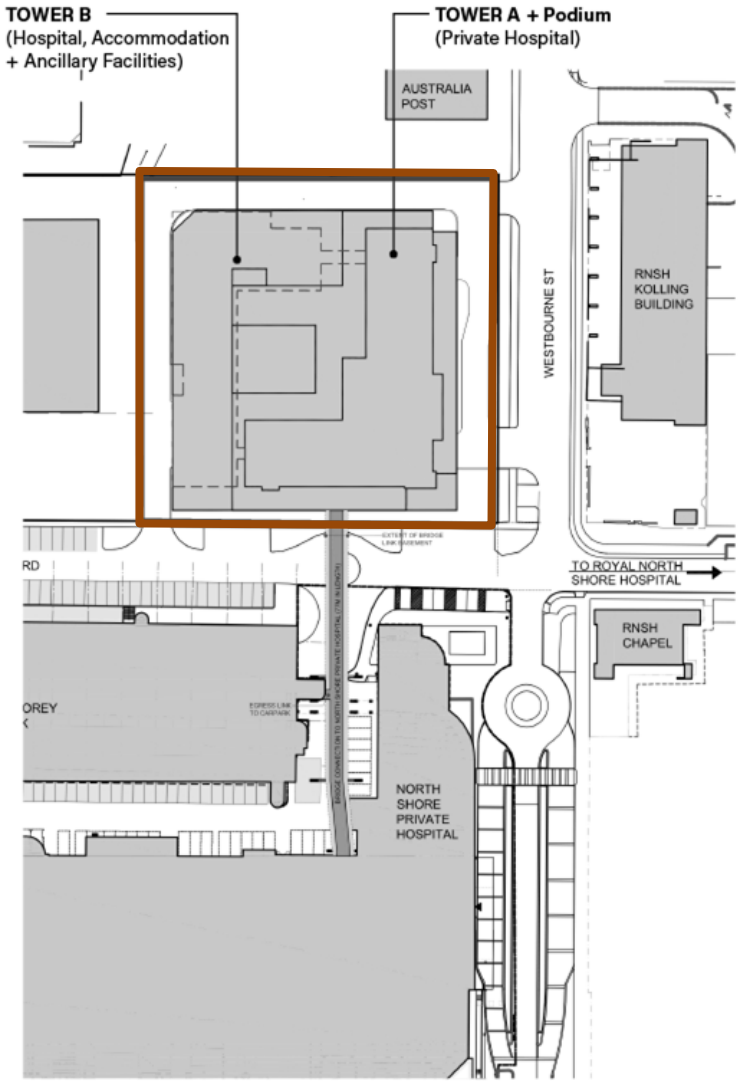


Figure 2 - Current Site Plan



The Site

2.01 URBAN CONTEXT

The site adjoins the northern edge of the Royal North Shore Hospital (RNSH) Precinct. This area is a mixture of old warehouse and low-rise commercial buildings juxtaposed against new mid-rise hospital, health services and research facility buildings. The context of the low industrial buildings to the north is likely to undergo uplift as a concentration of medical and associated services facilities are being encouraged to invest in the area.

As part of a masterplan redevelopment key sites within the RNSH precinct are also either under construction or at masterplan stages. These projects are likely to further expand and heighten key sites and the closest example is the Education and Learning Centre. The proposed NSW Health Office commercial tower is within the RNSH precinct.

The hospital master plan will also make provisions to significantly improve access to public transport with better connections across the campus and to St Leonard’s railway station.

The Ramsay’s Northside Clinic mental health hospital is currently under construction on Frederick Street opposite a significant large format retail premises, both within the industrial zone.



Urban Context Diagram

LEGEND

- 12 FREDERICK ST SITE
- SUBJECT SITE
- HOSPITAL PRECINCT AND MEDICAL FACILITIES
- IN1 + IN2 INDUSTRIAL ZONING
- OPEN SPACE
- EDUCATION
- COMMERCIAL (*) - DENOTES COMMERCIAL USE WITHIN HOSPITAL PRECINCT
- MIXED USE + HIGH DENSITY RESIDENTIAL
- LARGE FORMAT RETAIL/HARDWARE

2.02 ROYAL NORTH SHORE HOSPITAL PRECINCT

The site is located centrally located within the RNSH Precinct, and provides opportunity to deliver a valuable service to the entire precinct in addition to servicing the demand within the site.

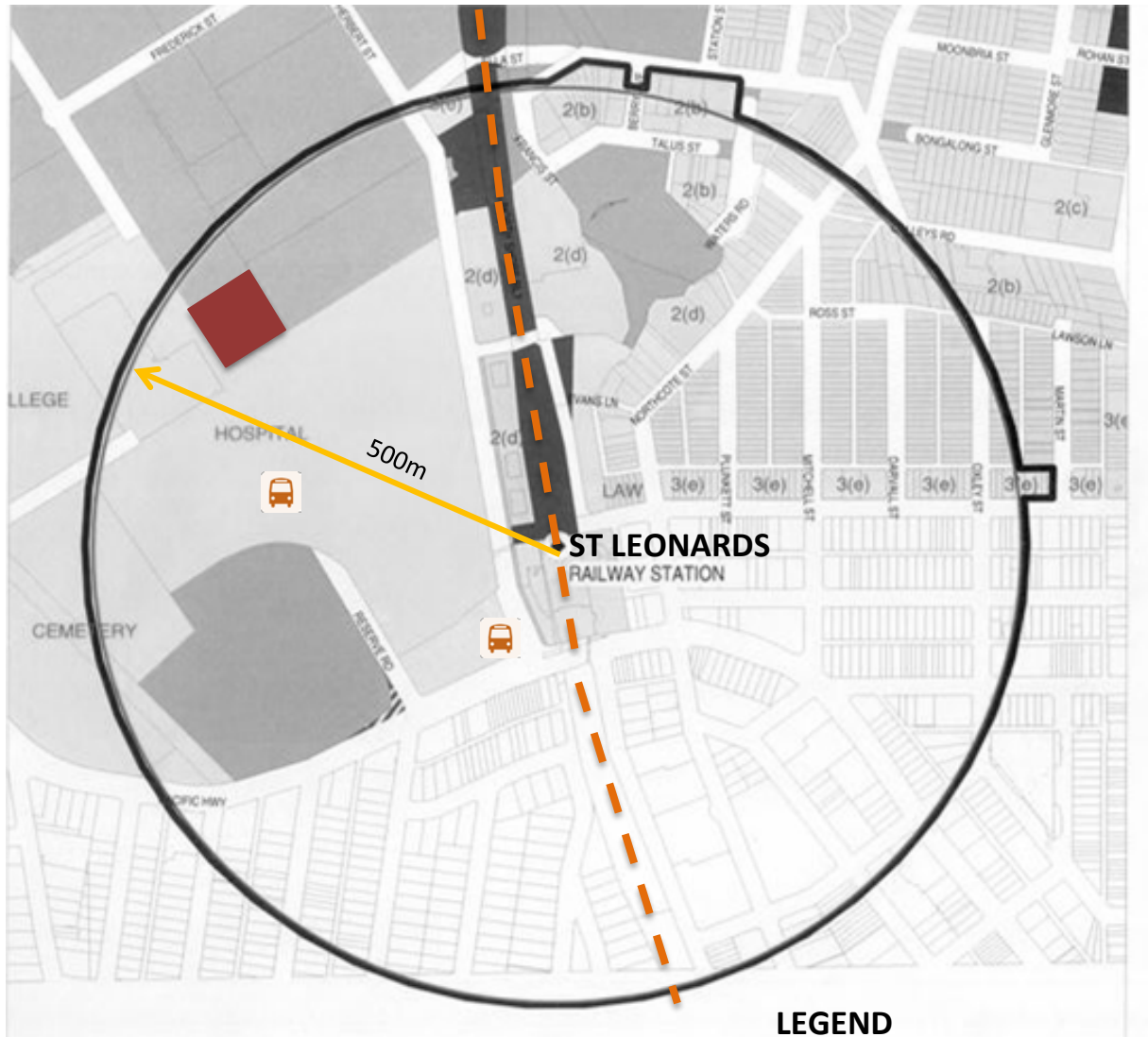


RNSH Precinct Diagram

2.03 TRANSPORT CONTEXT

The site sits within the WDCP railway precinct area and is within 500m to St Leonards Railway Station. Multiple Bus stops are also located within this radius providing high frequency services to Lane Cove, Chatswood, Macquarie Centre, North Sydney and the Sydney CBD.

In addition to on-site parking there is the hospital car parking station directly opposite. Overall, the site is well serviced by a variety of transport options.



Willoughby DCP Railway Precinct Plan St Leonards

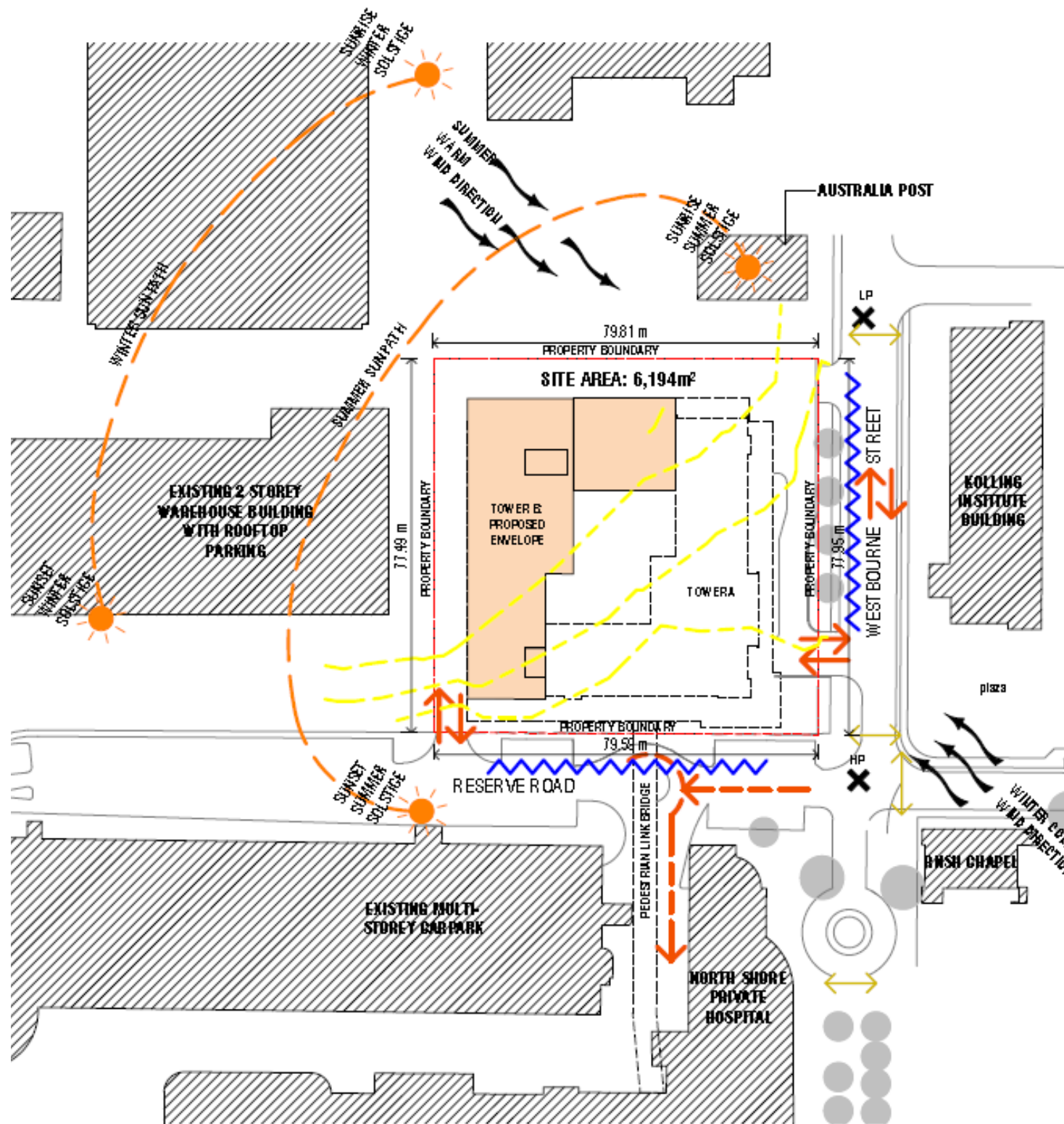
- LEGEND**
-  NORTH SHORE RAIL LINE
 -  500m RADIUS AROUND SITE
 -  BUS STOP
 -  SUBJECT SITE

2.04 SITE ANALYSIS

Proposed Lot 1 has a site area of 6,194m². It sits on a steeply sloping site that falls away steeply from both Westbourne Street and Reserve Road.

Vehicular access points are from both streets, Westbourne Street being the primary public frontage and taking general traffic with Reserve Road providing service access.

Pedestrian pathways link the site and provide a clear line of sight to entry and drop off points. The site has good solar access to the North and North West and has view opportunities in that same direction towards Chatswood CBD.



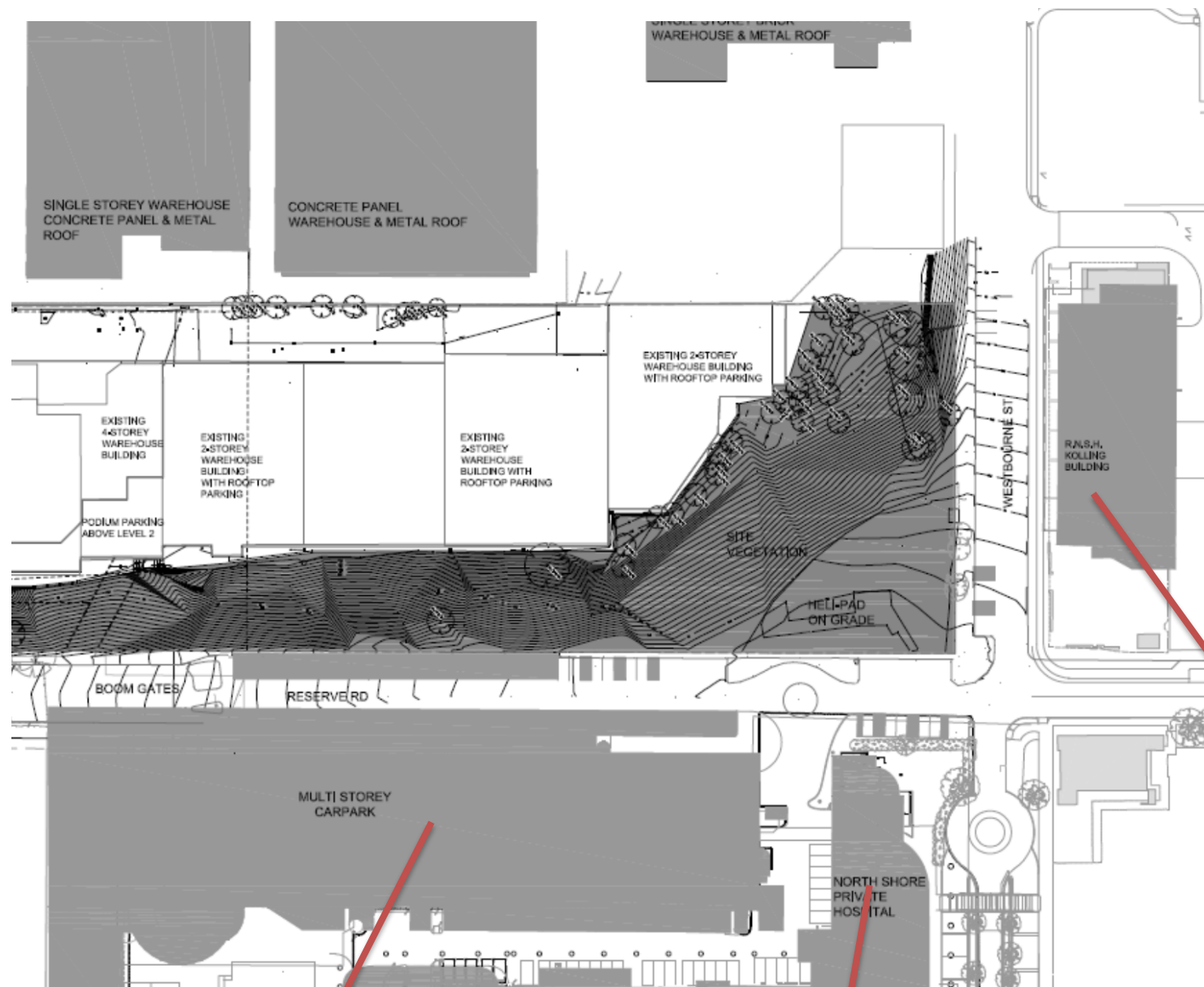
LEGEND

- VEHICULAR MOVEMENT
- PEDESTRIAN MOVEMENT
- PREVAILING WIND
- SUN PATH
- ROAD NOISE
- 5 m CONTOURS

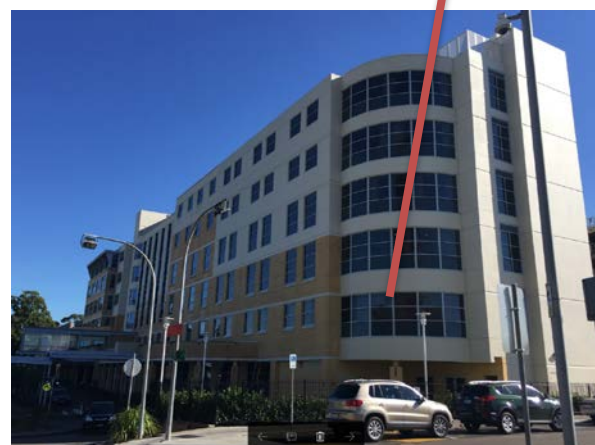


Extract from Site Analysis Diagram

HPI Architects Image – Site Topography Plan



Multi Storey Carpark



North Shore Private Hospital

2.05 TOPOGRAPHY AND STREETScape

The topography of the site is steeply sloping away from the Westbourne and Reserve Road boundaries to the ground level of the warehouses below. These steep contours reference the history of the site being an old Shale quarry. A triangular portion of the site adjoining the street corner is generally level and was formerly used as a helicopter-landing zone.

Westbourne Street is a relatively steep grade, while the land within the site falls away sharply. Reserve Road has a gradual fall to the northwest. The road intersection is the crest of the hillside.

To the Reserve Road frontage, the existing streetscape is characterised by the existing 5 storey public carpark and broken at the street junction with the end portion of the 5 storey North Shore Private Hospital wing.

The Kolling Institute Tower is the major streetscape façade fronting the site. This 11 storey building has a highly contemporary façade with a minimal setback at the upper level and has a 3 storey recessed entry space lined with a bladed colonnade.



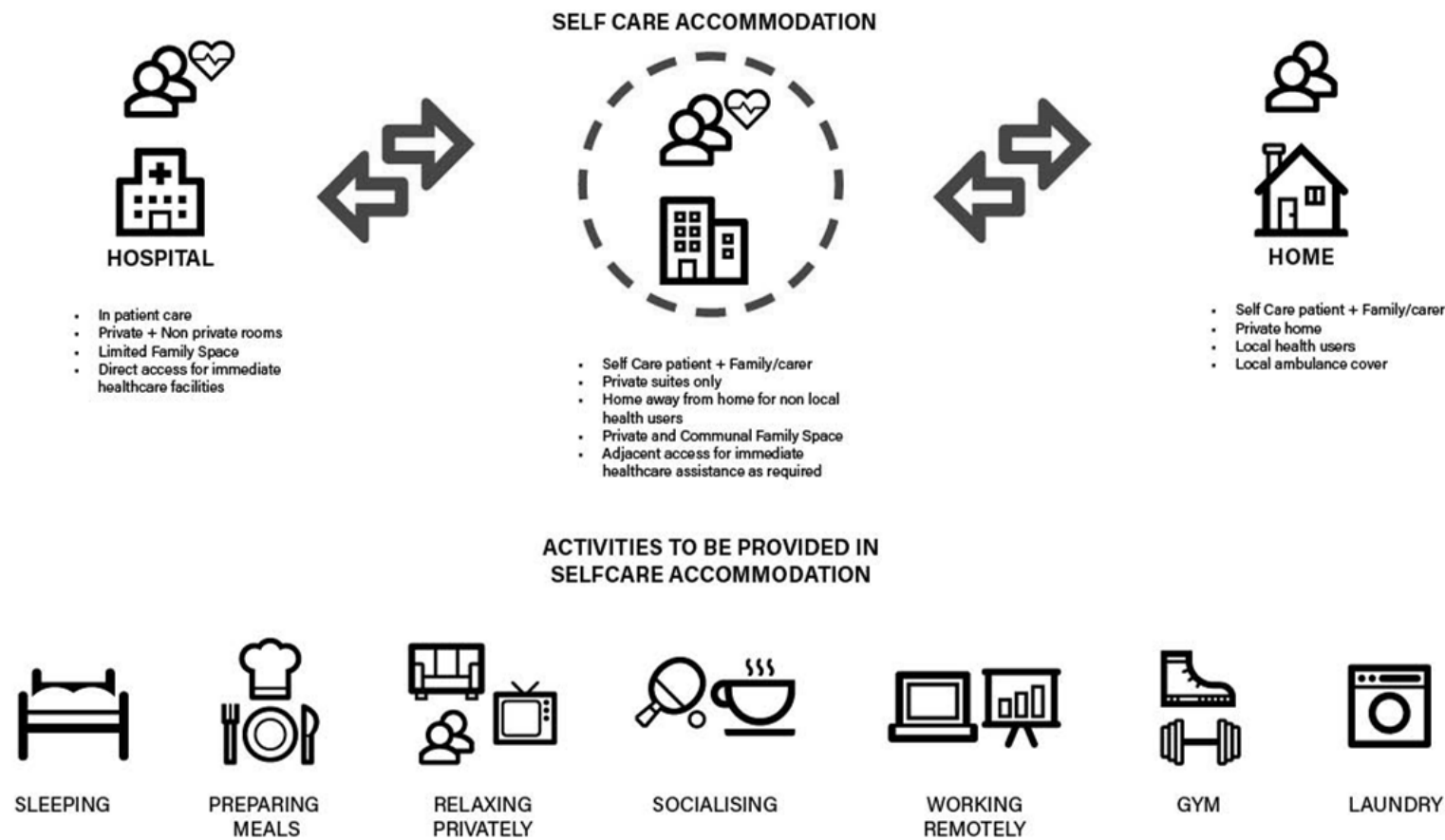
Kolling Institute Building

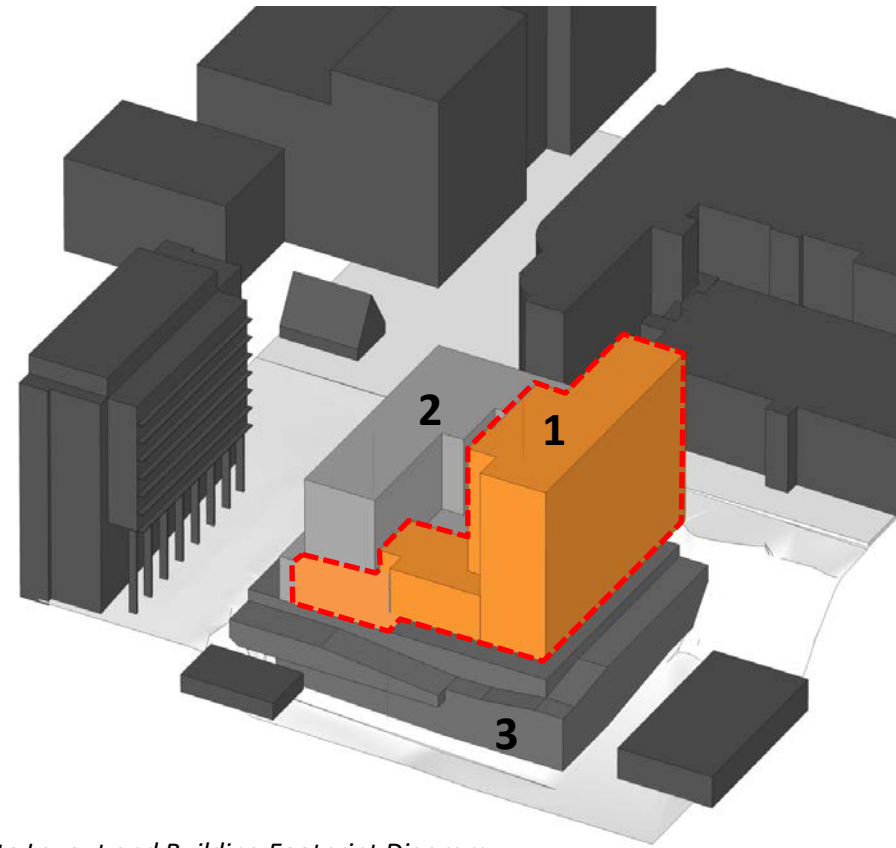
2.06 INDICATIVE USES

Uses associated with the proposed hospital, accommodation and ancillary facilities, including (but not necessarily limited to):

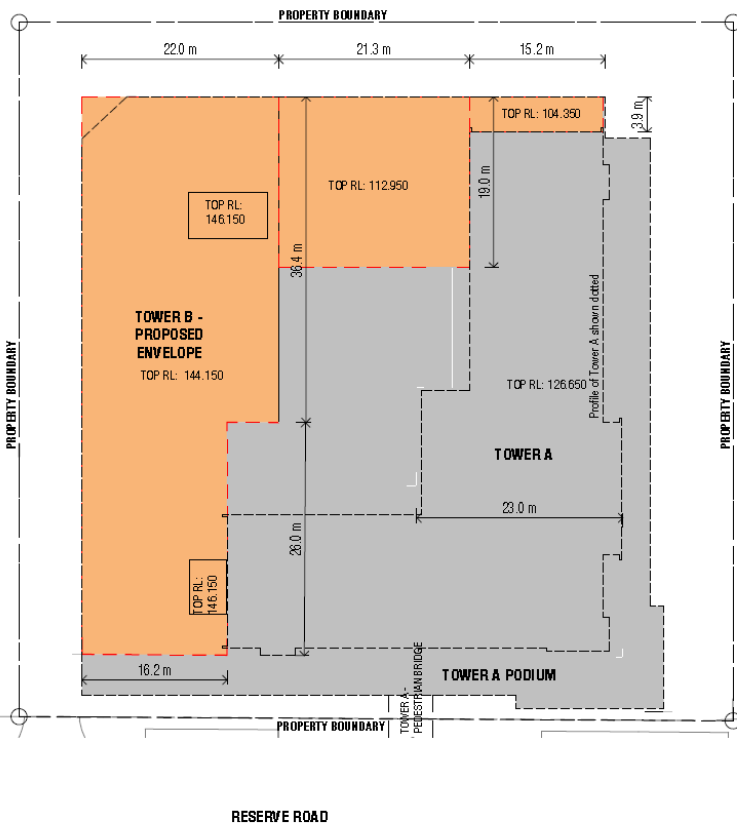
- medical consulting rooms
- operating and procedure rooms
- approximately 185 accommodation rooms consisting of post-natal suites, health care worker, patient and visitor accommodation
- education and conference meeting rooms
- gymnasium
- additional car parking (proposed number to be confirmed) to be accommodated in the basement car park of the private hospital

DEFINING THE USERS





Site Layout and Building Footprint Diagram



Proposed Envelope- Plan View

LEGEND

- TOWER B ENVELOPE (PROPOSED)
- TOWER A (AS PART OF SSD7543)
- PODIUM (AS PART OF SSD7543)

3.0 DESIGN PRINCIPLES

3.01 SITE LAYOUT & BUILDING FOOTPRINT

The site layout of the proposed envelope has been informed by 4 key components:

1. Tower B Component

This element is the tallest and sits on of the podium, respecting street and side boundary setbacks. Tower B is an 9 level element (above podium) that contains hospital, accommodation and ancillary services. Tower B is of a scale relative to the Kolling Institute building and has been located in a zone that has the least impact to the operational areas of the hospital below.

The proposed Tower B location marries into the indicative location shown on the original proposal (SSD 7543).

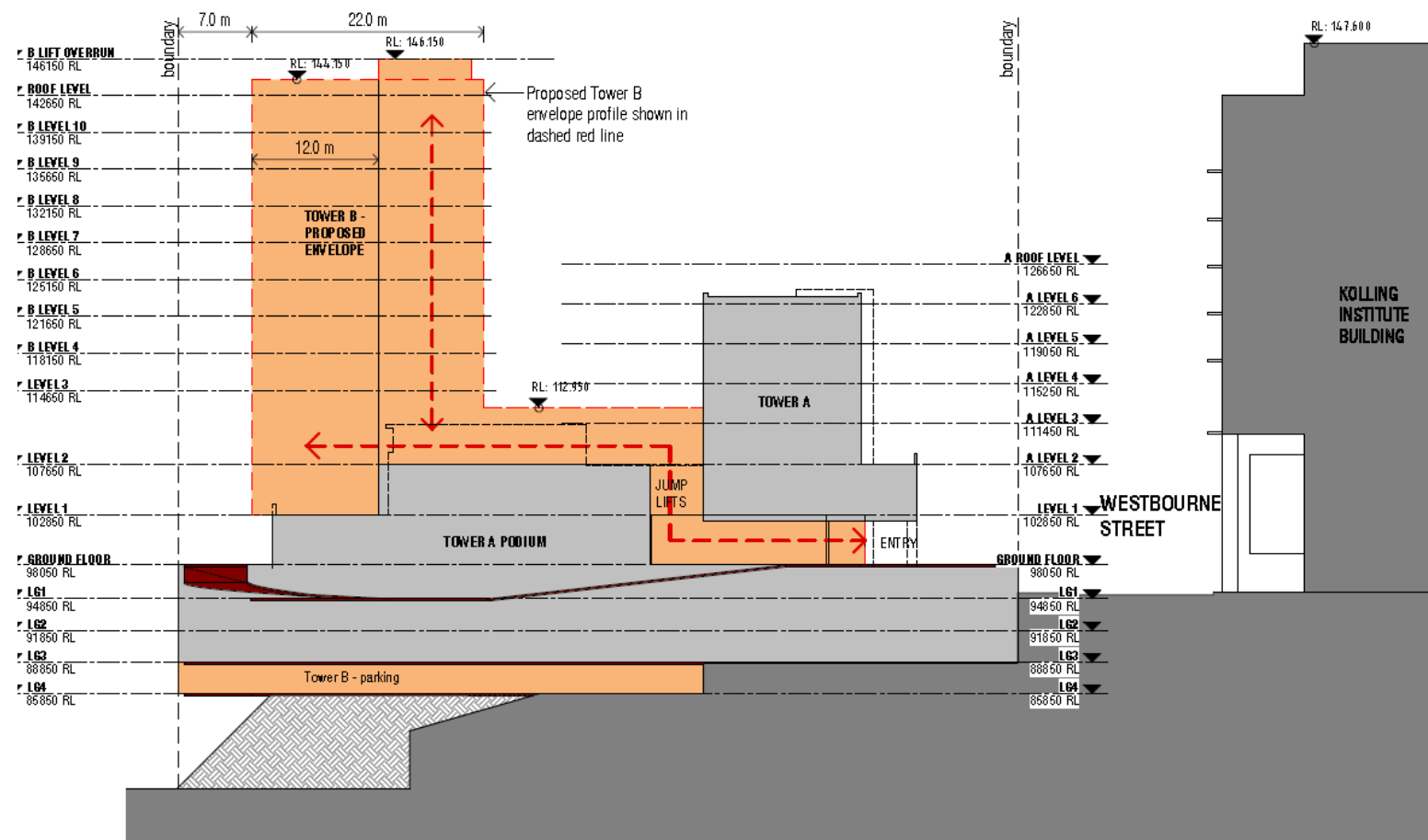
2. Podium + Tower A Component

The podium is generally a 2 level element that transitions height down to street level. Tower A is a 6 storey element (above podium) that contains the private hospital. This scale of tower is in keeping with the relative height of the 5 storey existing North Shore Private Hospital and its public carpark building which are located opposite the site.

The Tower A Component steps back above the podium to maximise the separation of mass away from Westbourne Street and allows better amenity to the street and outlook of the Kolling Institute Building.

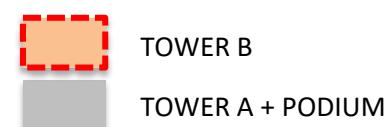
3. Ground & Below Ground Component

This contains areas for building setbacks to streets and side boundaries and concurrently serves as general traffic and emergency vehicular access to the circumference of the building. General parking and rampways are configured below the street level utilising the natural slope of the site to minimise the impact to the streetscape.



Site Section

LEGEND



3.02 GFA

The Tower B building envelope, as noted in the Tower A proposal, allows the additional GFA of the site to be completed to the Planning Proposal FSR (3:1).

The total GFA of Tower B is 7,655m²

FREDERICK STREET ST LEONARDS TOWER B CONCEPT DESIGN

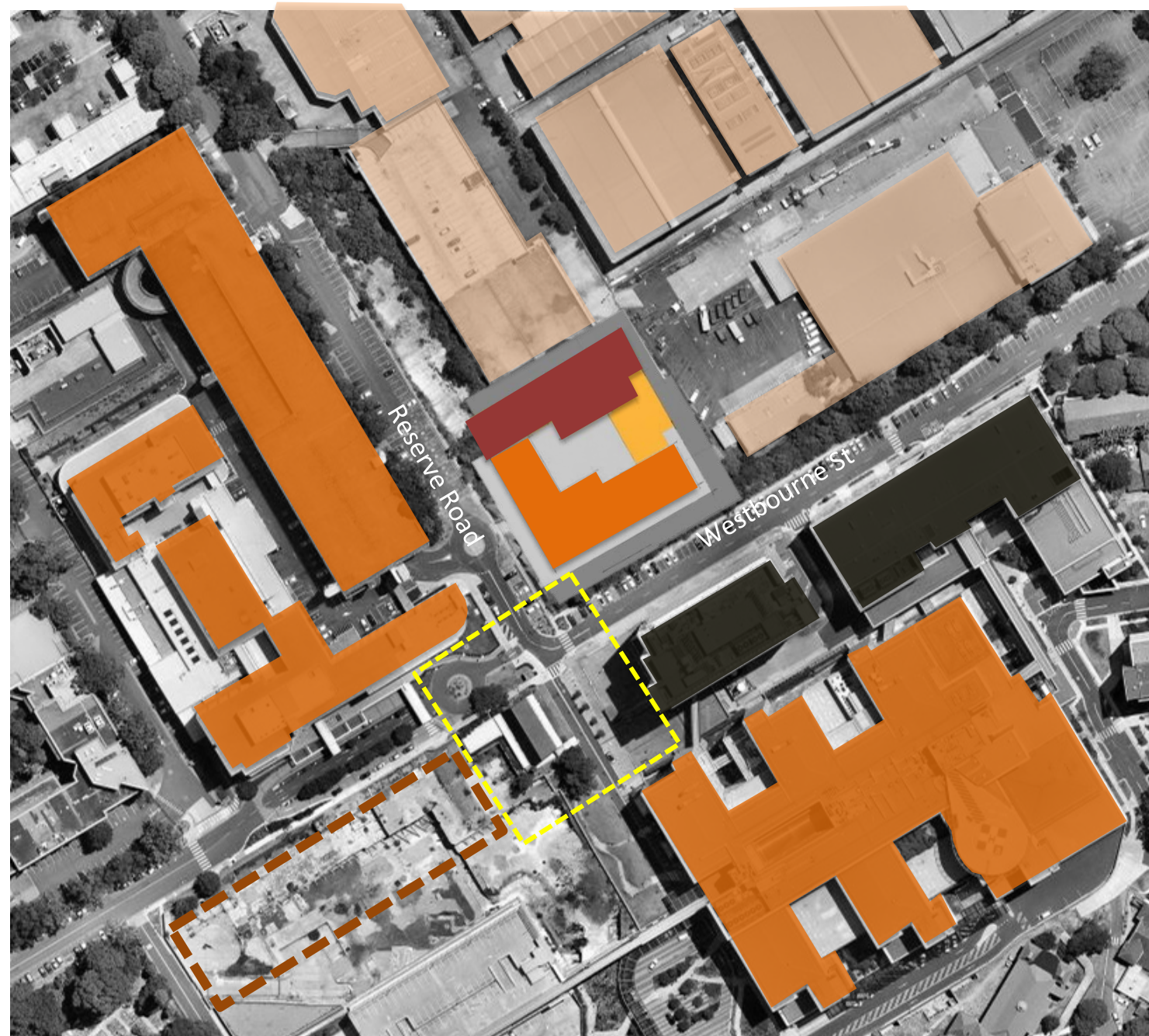
INDICATIVE AREA SCHEDULE

Tower A	GFA
Tower A + PODIUM (STAGE 2DA SCHEME)	11,586
Deductions due to Tower B Indicative scheme overlay	418
TOWER A TOTAL	11,168 m2

Tower B	LEVEL	GFA
	B5	-
	B4	-
	B3	-
	B2	-
	B1	-
	Ground	250
	Level 1	650
	Level 2	355
	Level 3	800
	Level 4	800
	Level 5	800
	Level 6	800
	Level 7	800
	Level 8	800
	Level 9	800
	Level 10	800
	Roof	-
TOWER B TOTAL		7,655 m2

COMBINED TOWER A + TOWER B	AREA
SITE AREA	6,194 m2
Tower A + Tower B Combined GFA	18,823 m2
Permissible GFA (3:1)	18,582 m2
Resultant FSR	3.0 :1

Indicative Area schedule attributed to proposed Tower B and Tower A



3.03 BUILDING HEIGHT

The Plaza to the Kolling Institute Building is seen as part of a nodal point within the RNSH Precinct defined at the junction of Westbourne St and Reserve Road. This nodal point is characterised by lower elements and open space surrounded by existing height.

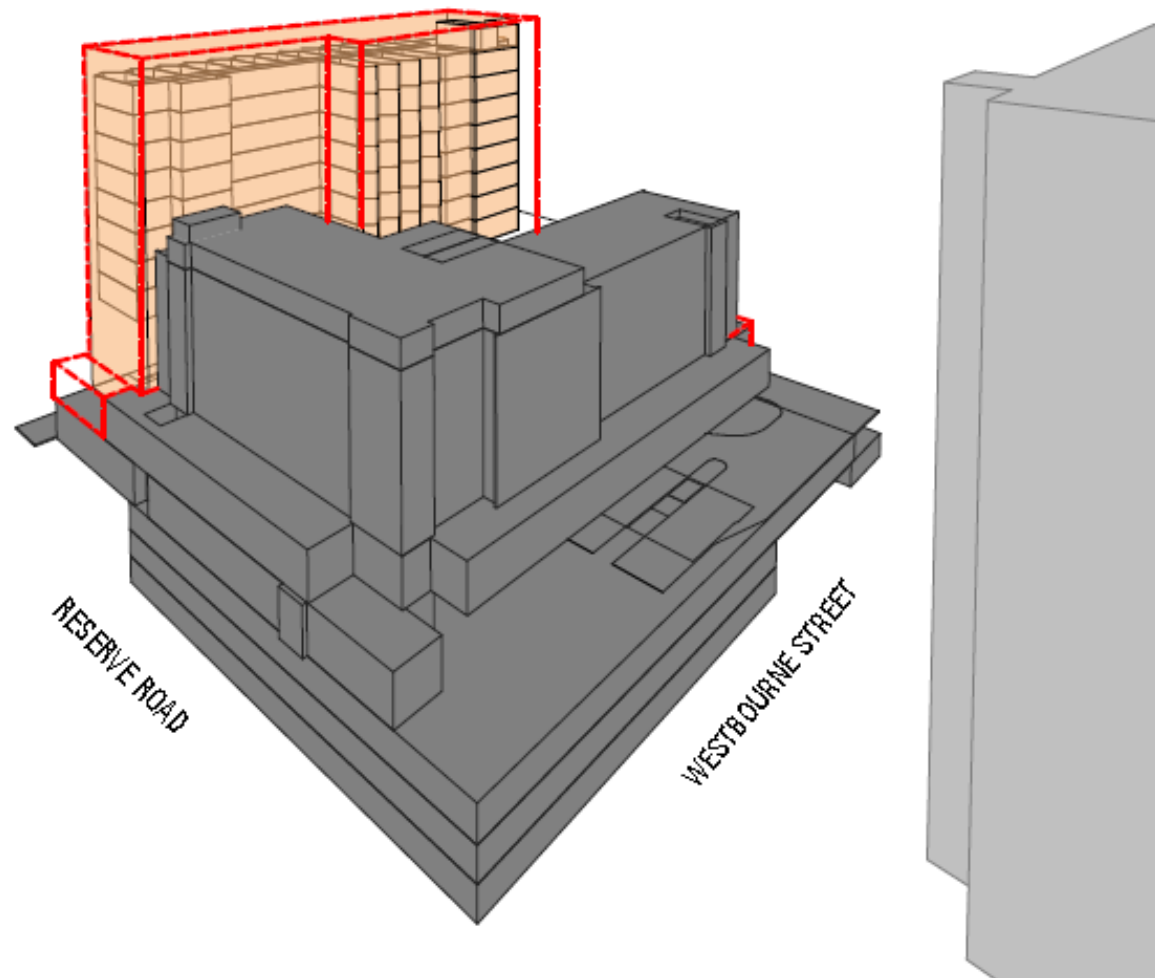
Taller buildings are seen pin wheeling around this nodal point. The first building being the Kolling Institute, the second being the future Research and Education Centre Tower and Tower B being the third pillar. These towers are of relative scale and are consistent with the prevailing built form character of the locality.

The difference in height between Tower B and Tower A provides for a varied skyline and visual interest.

Building Height Diagram

HEIGHT LEGEND

- PROPOSED TOWER B – 9 LEVELS ABOVE 2 LEVEL PODIUM (TOWER A)
- 8-11 LEVELS
- RESEARCH AND EDUCATION TOWER – APPROX 9 LEVELS
- 5 – 7 LEVELS
- 2 - 4 LEVELS
- 0-2 LEVELS
- TOWER B PODIUM LINK – 1 LEVEL



3.04 BUILDING MASSING

The proposed Tower B envelope is articulated in depth and height to create clear forms that can be read from the street as identifiable program elements. The podium fronting Westbourne St has a recessed form signifying entry points and front of house services. The Tower A set back from the podium defines the Private Hospital and Tower B, through height and narrow form clearly defines the use as hospital, accommodation and ancillary facilities.

The architectural language is envisaged to complement the contemporary nature of the recently completed buildings within the precinct. Expression of environmental sustainability will be encouraged on the façade with elements such as sun shading devices and solar panelling.

The overall scale and building massing is consistent with the character of the precinct with the blade tower configuration evident within the context.

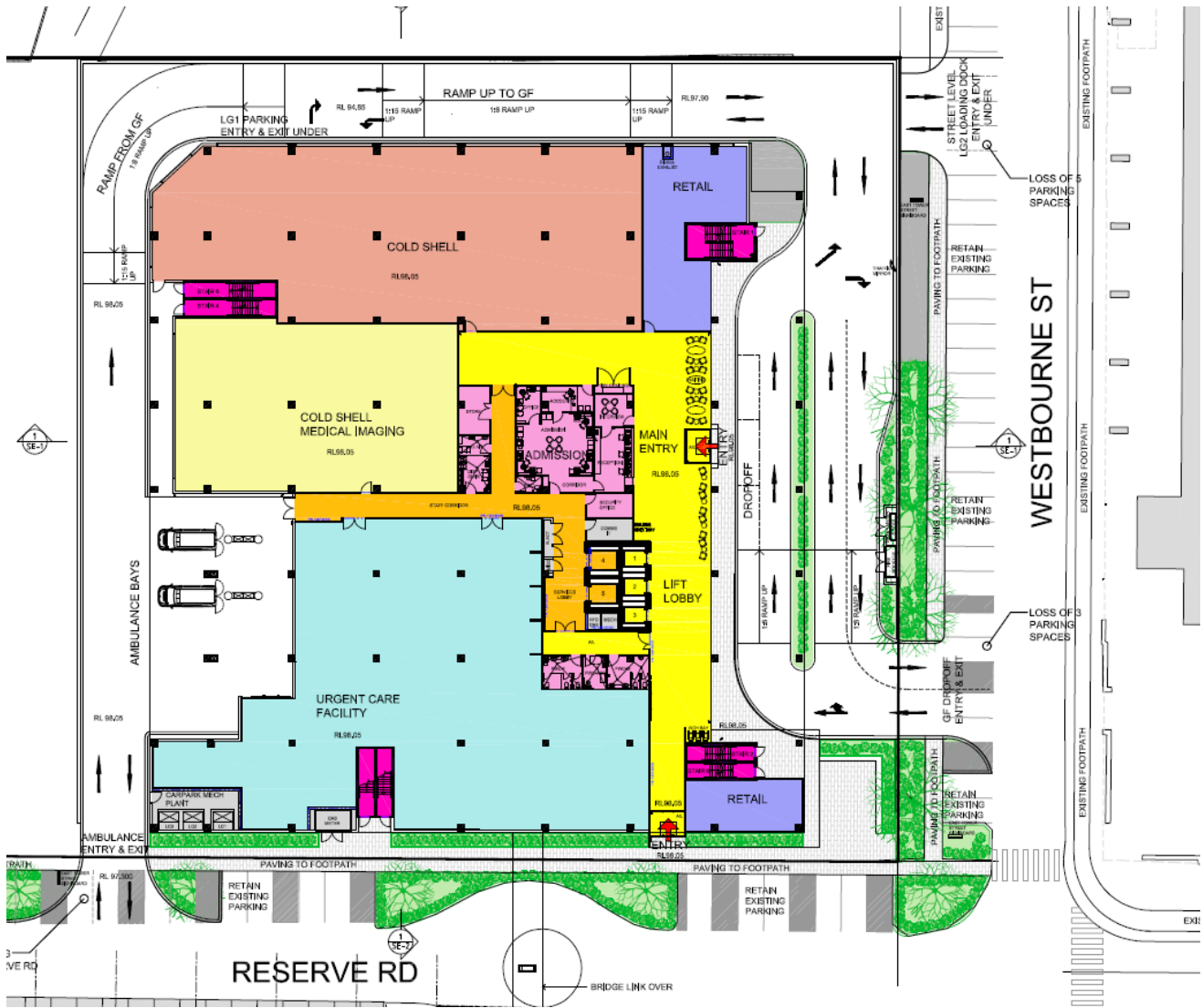
4 SOUTH-WEST PERSPECTIVE
SCALE:

LEGEND

- TOWER B ENVELOPE
- TOWER A + PODIUM (REFERENCING SSD 7543)

3.05 SITE ACCESS, LANDSCAPING + TREE PLANTING

The Tower B building envelope, as noted in the Tower A proposal, is an elevated tower that utilises the site access and landscaping nominated in the Tower A proposal. Street landscaping is as per SSD 7543 – Ground Floor Plan.



Landscape treatment at street level

Extract of Private Hospital Stage 2 DA - Ground Floor Plan- HPI Architects

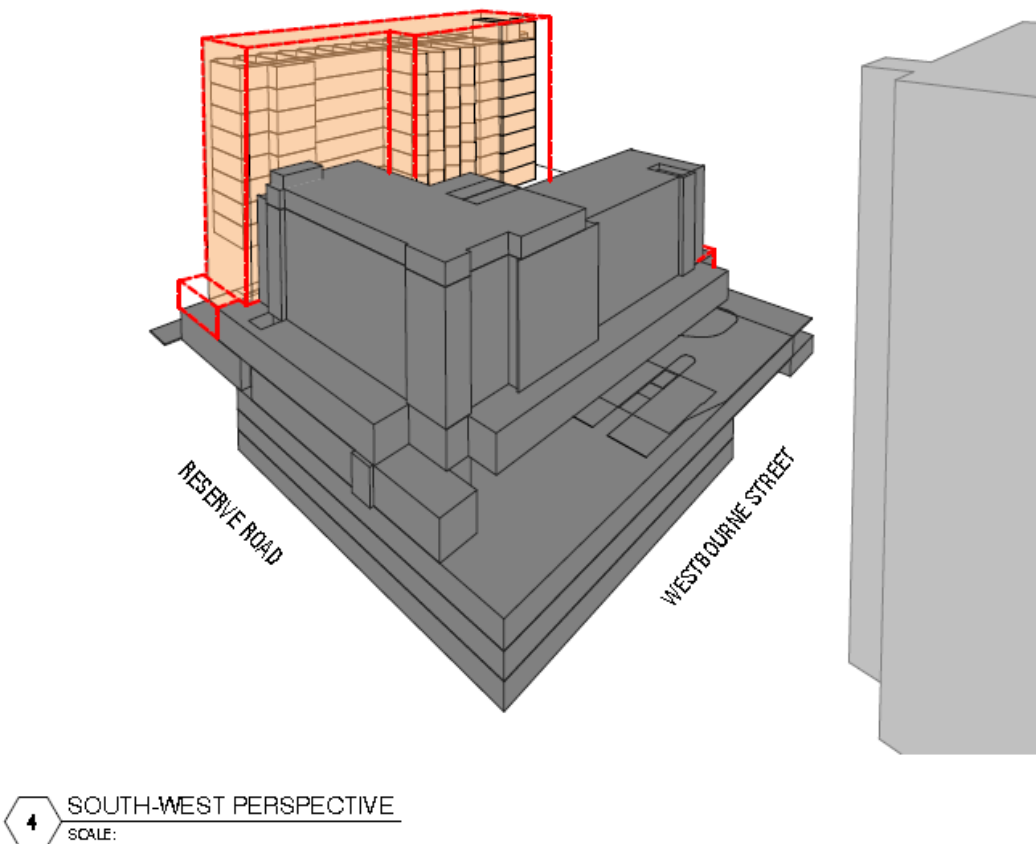
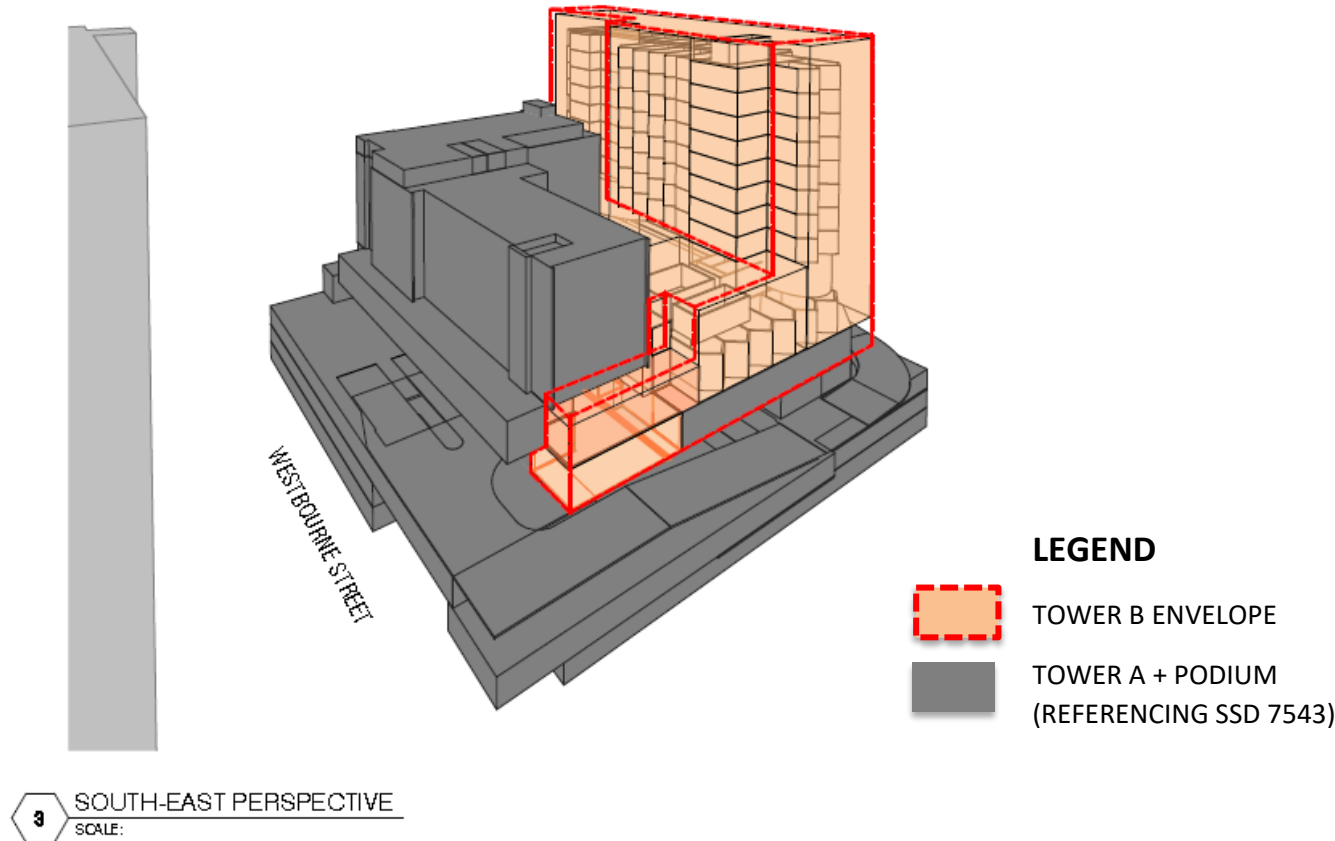
3.06 THE PROPOSED ENVELOPE

The proposed building envelope defines the extent of the developable volume and appropriately integrates Tower B into the Tower A Private Hospital.

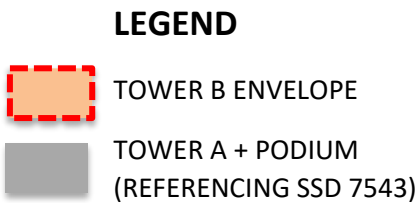
This envelope allows for elements such as building setback and height and provides volumetric space for building articulation.

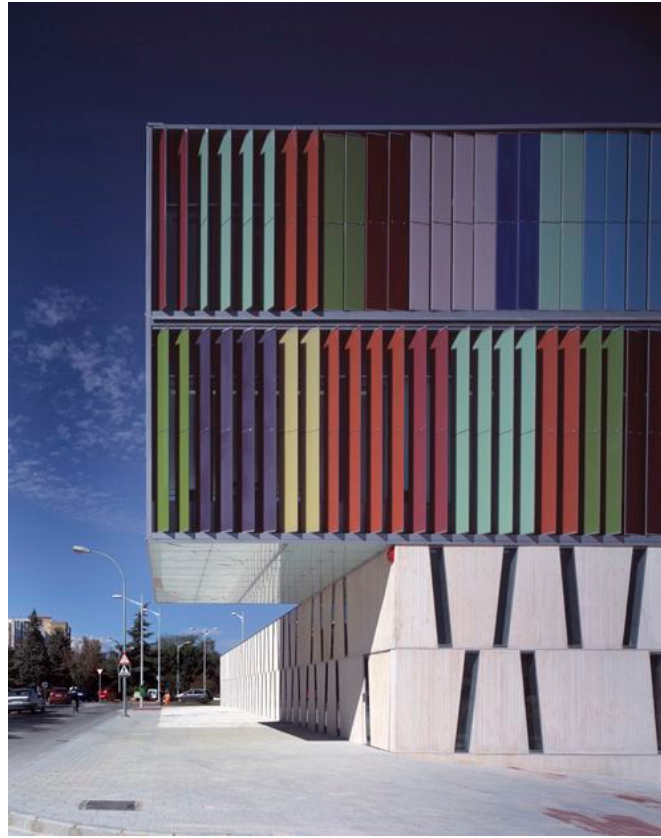
The resultant envelope has been guided by the Tower A & podium scheme along with a conceptual indicative design of the hospital, accommodation and ancillary facilities scheme in Tower B.

The envelope will provide a guiding framework for a holistic detailed design of Tower B to be undertaken.



Proposed Envelope- Plan View





3.07 INDICATIVE FAÇADE ARTICULATION & MATERIALITY

The proposed envelope allows for architectural expression and articulation, essential in the clear expression of form and building program.

Façade materiality and colour is seen as a key opportunity to have an interactive and positive effect on patients and visitors alike.

3.08 SOLAR ACCESS AND SHADOW ANALYSIS

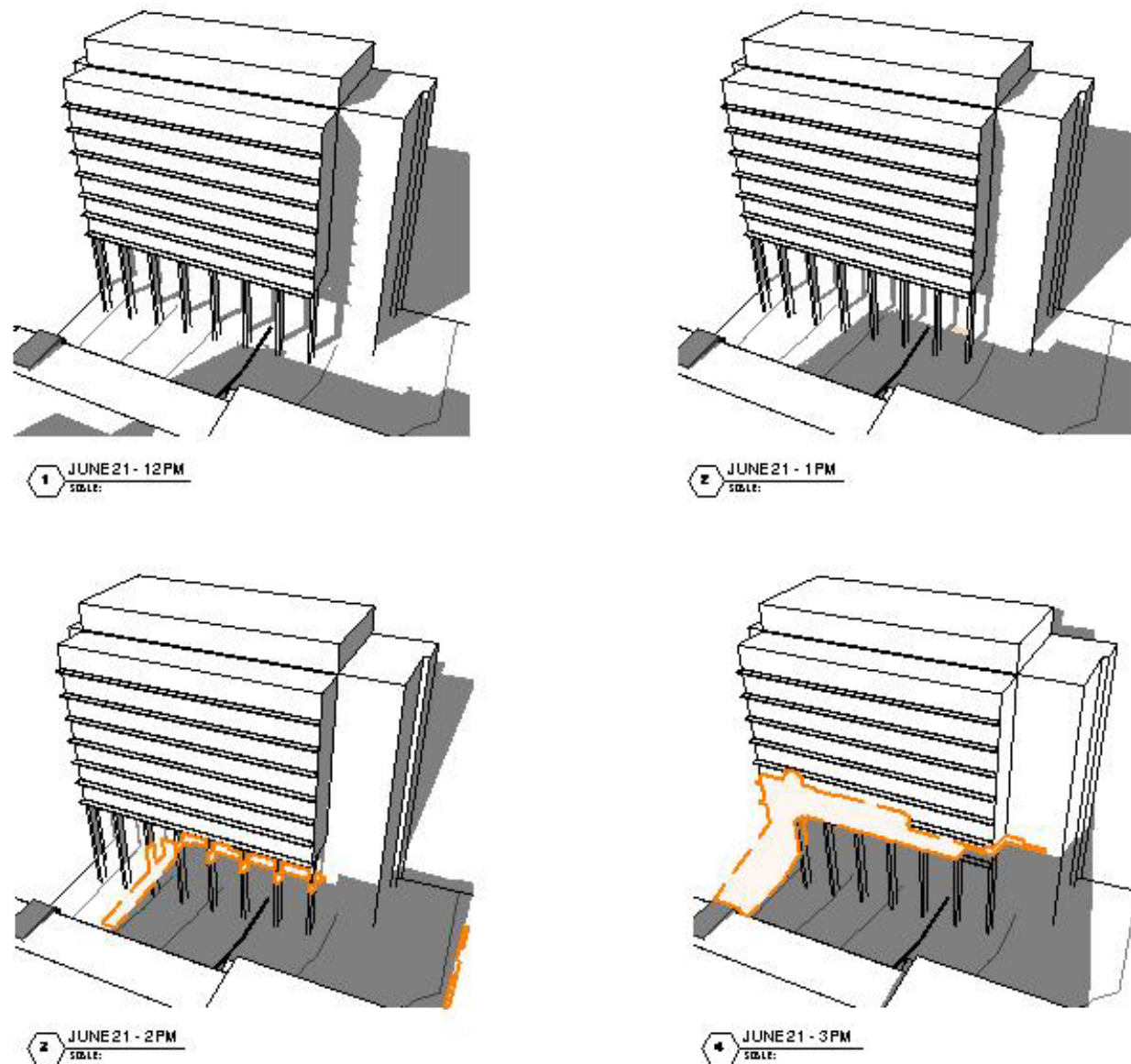
Solar analysis studies have been undertaken to assess the impact of the proposed envelope to the adjoining sites and within the site itself. The extent of additional overshadowing from the Tower B envelope is minimal, predominantly falling in line with the shadow cast by Tower A.

Shadow studies at Winter Solstice (June 21st) indicate that the morning shadows extend over the existing North Shore Hospital carpark and the eastern facade of the existing North Shore Private Hospital until approximately 12pm - then shadows approach the Kolling Institute Building façade. Given that the Kolling Institute Building is elevated above street level and has a recessed façade behind a 3 level colonnade to Westbourne St, the impact of shadow at these lower levels is progressive only from 1pm onwards. From 1pm to 3pm the Kolling Institute Building is affected by shadow from both Tower A and Tower B up to level 4.

The shadows studies have been segmented into two components – That of the Tower A and podium (Private Hospital scheme) and then secondly that of Tower B (coloured). What this illustrates is the extent of impact of both Tower A & Tower B to the surrounding buildings and at an even more detailed level, the specific extent of Tower B shadow (shown in orange) beyond that of Tower A.

At an intra-site level, shadow casting will be taken into consideration at the detailed design stage to explore ways of articulating the building form in such a way as to maximise solar access to podium level courtyards and to internal looking hospital wings of Tower A.

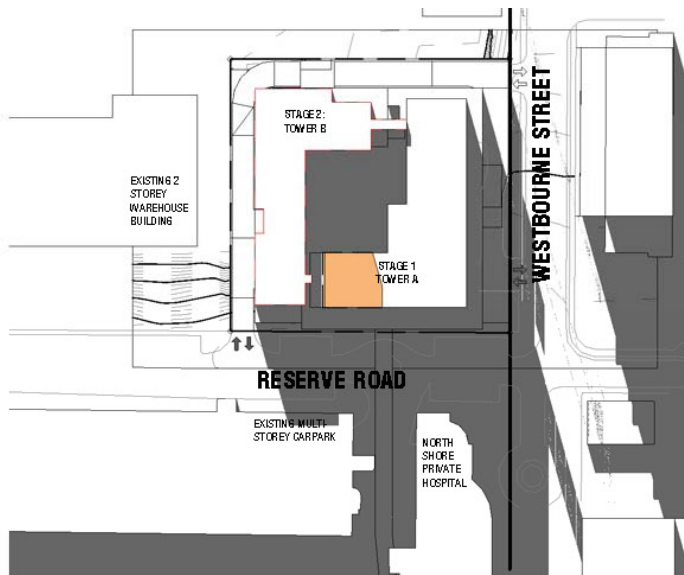
Given the site terrain, aspect and determined mass of Tower A & podium, these sun studies support the placement of mass within the proposed envelope such that overshadowing effect is minimised to surrounding buildings, in particular the existing North Shore Private Hospital and the Kolling Institute Building.



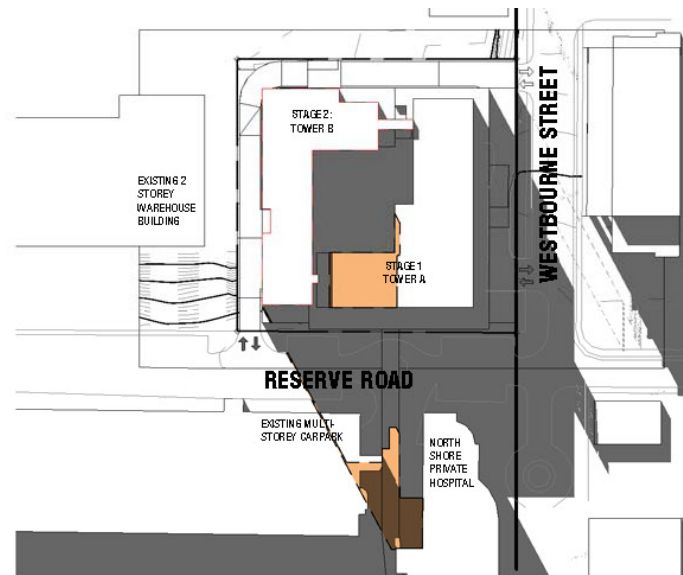
Shadow Impacts Analysis on Kolling Institute Building

LEGEND

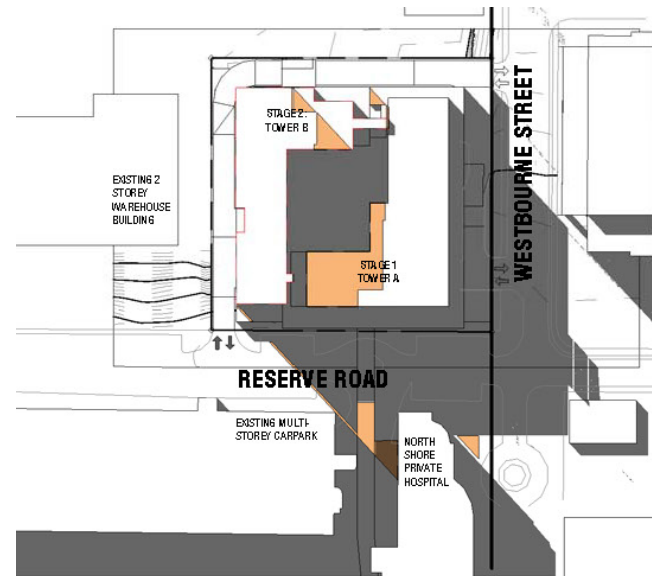
-  SHADOW CAST BY TOWER A AND INDICATIVE TOWER B ENVELOPE (SSD 7543)
-  ADDITIONAL SHADOW FROM PROPOSED TOWER B



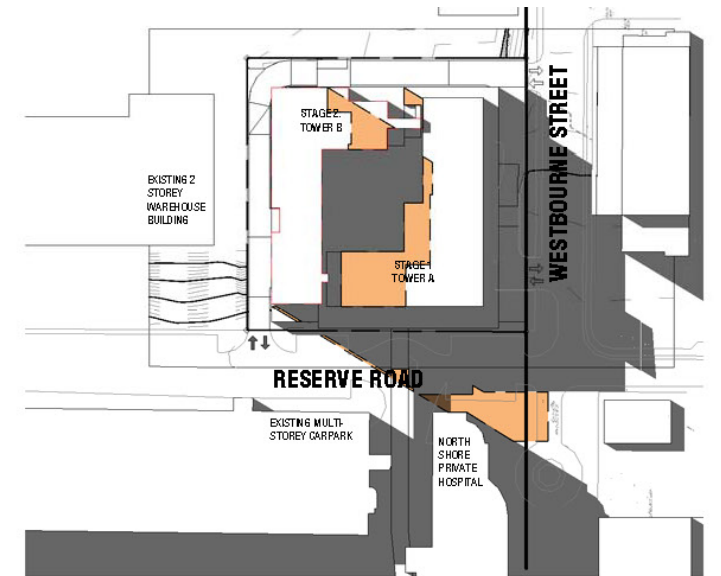
9am - Winter Solstice



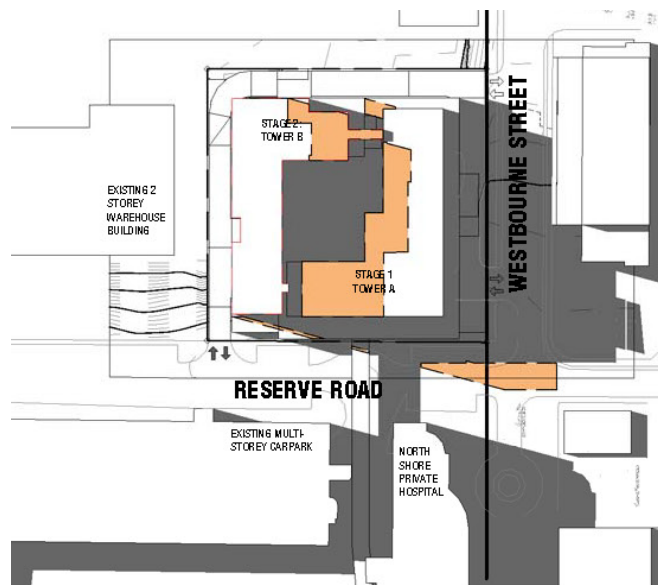
10am - Winter Solstice



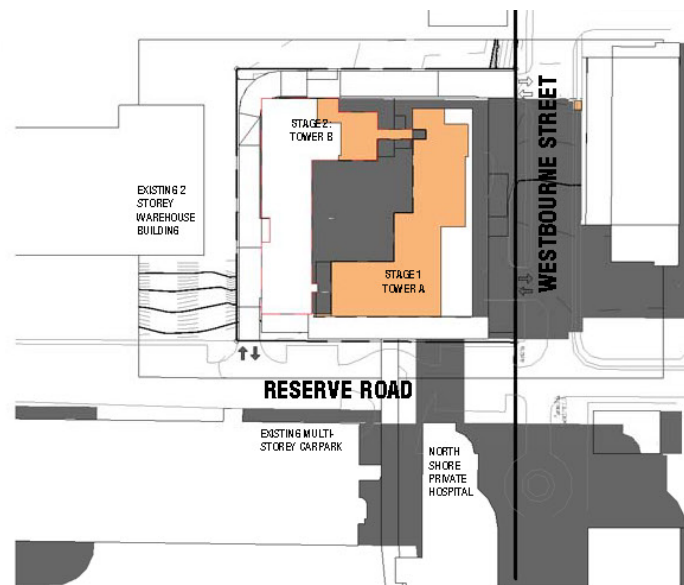
11am - Winter Solstice



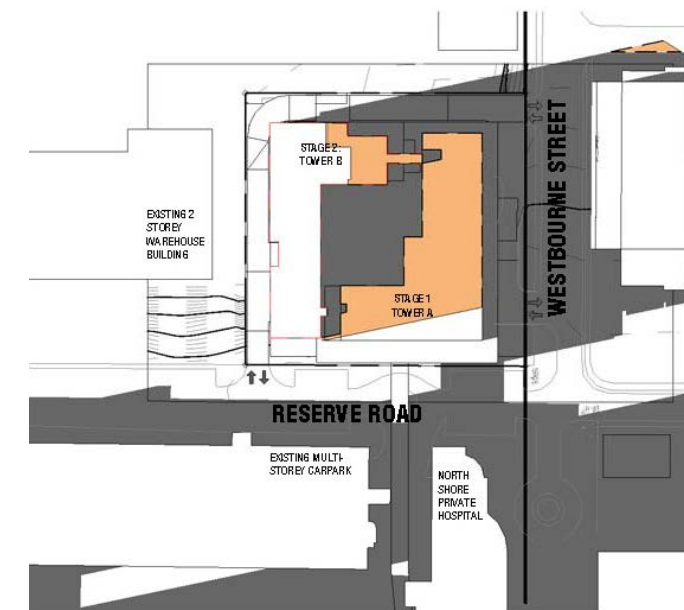
Noon - Winter Solstice



1pm - Winter Solstice



2pm - Winter Solstice



3pm - Winter Solstice

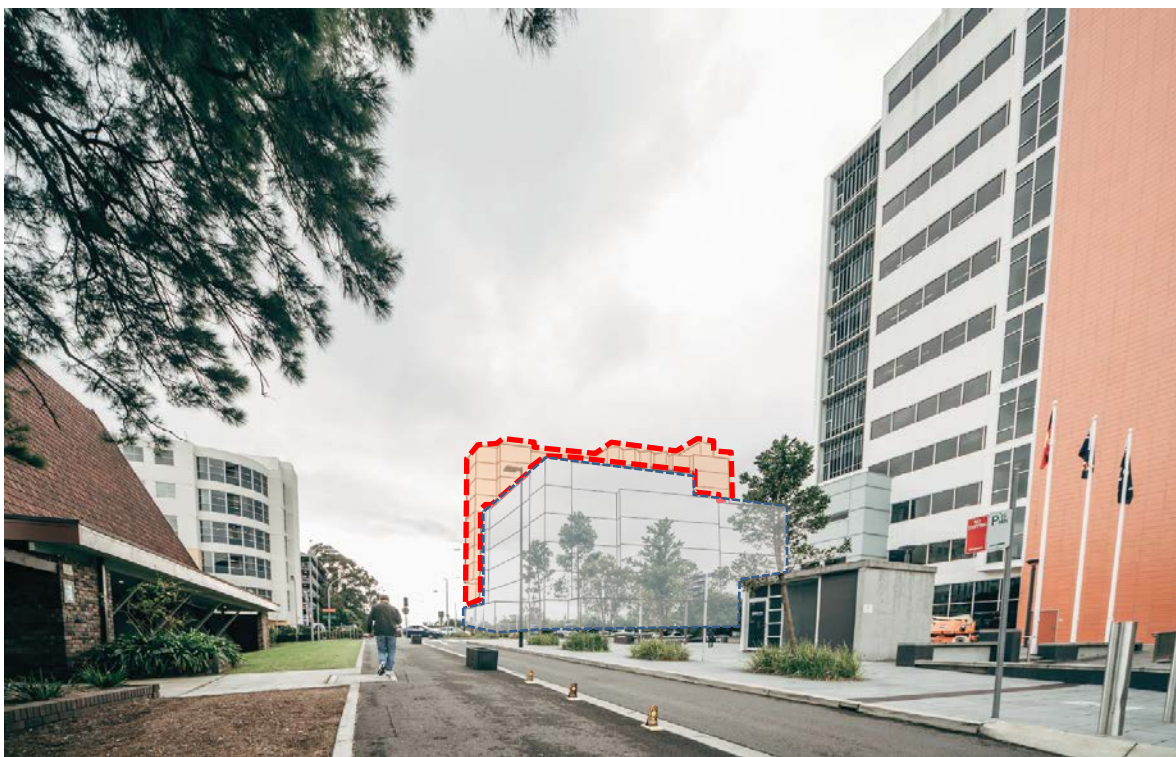
LEGEND

- SHADOW CAST BY TOWER A AND INDICATIVE TOWER B ENVELOPE (SSD 7543)
- ADDITIONAL SHADOW FROM PROPOSED TOWER B

Shadow Impacts Analysis



View approaching the site from Westbourne Street



View approaching the site from Reserve Road heading North

LEGEND

- TOWER B
- TOWER A + PODIUM
(REFERENCING SSD 7543)

3. 09 VISUAL IMPACT, VIEWS AND PRIVACY

Visual Impact

The primary view is via the vehicular approach to the site, up Westbourne Street heading North West towards the Kolling Institute Building public plaza. The view is revealed progressing up the hill and is framed by the Acute Care and Kolling Institute Building on the left hand side. These building have established a high street wall given their scale and zero setback.

Given the proposed Tower A and podium are setback from the street the visual impacts are kept to a minimum. As seen in the indicative views from the street, the height of Tower B sits behind that of Tower A and is therefore less visually dominant.

The pedestrian approach to the site is via Reserve Road heading North. This interface has the context of the Public Plaza in the foreground and the proposed building framed by the Kolling Institute Tower on the right and the existing North Shore Private Hospital on the left. The setback of Tower A and podium softens the view as does the stepping back of the podium to Tower A, with Tower B being in the most part obscured behind.

Views

The site enjoys views in a North Westerly aspect back towards Chatswood CBD. Tower B has been placed along this boundary frontage to take advantage of this view.

Privacy

Privacy considerations have been assessed as primary views out from the Kolling Institute Building to Westbourne Street and from the partial north eastern end of the existing North Shore Private Hospital facing onto Reserve Road.

As Tower B is placed to the furthest distance away from Westbourne Street, potential privacy impacts to Kolling Institute Building have been minimised.

By the nature of the curved end form of the existing Royal North Shore Private Hospital, views from this portion of the building are directed away from the subject site and address more to the Chapel and Plaza on Westbourne Site. This façade also has heavily tinted windows and inbuilt blinds to further enhance privacy related issues towards this easterly direction.



View approaching the site from Reserve Road heading South

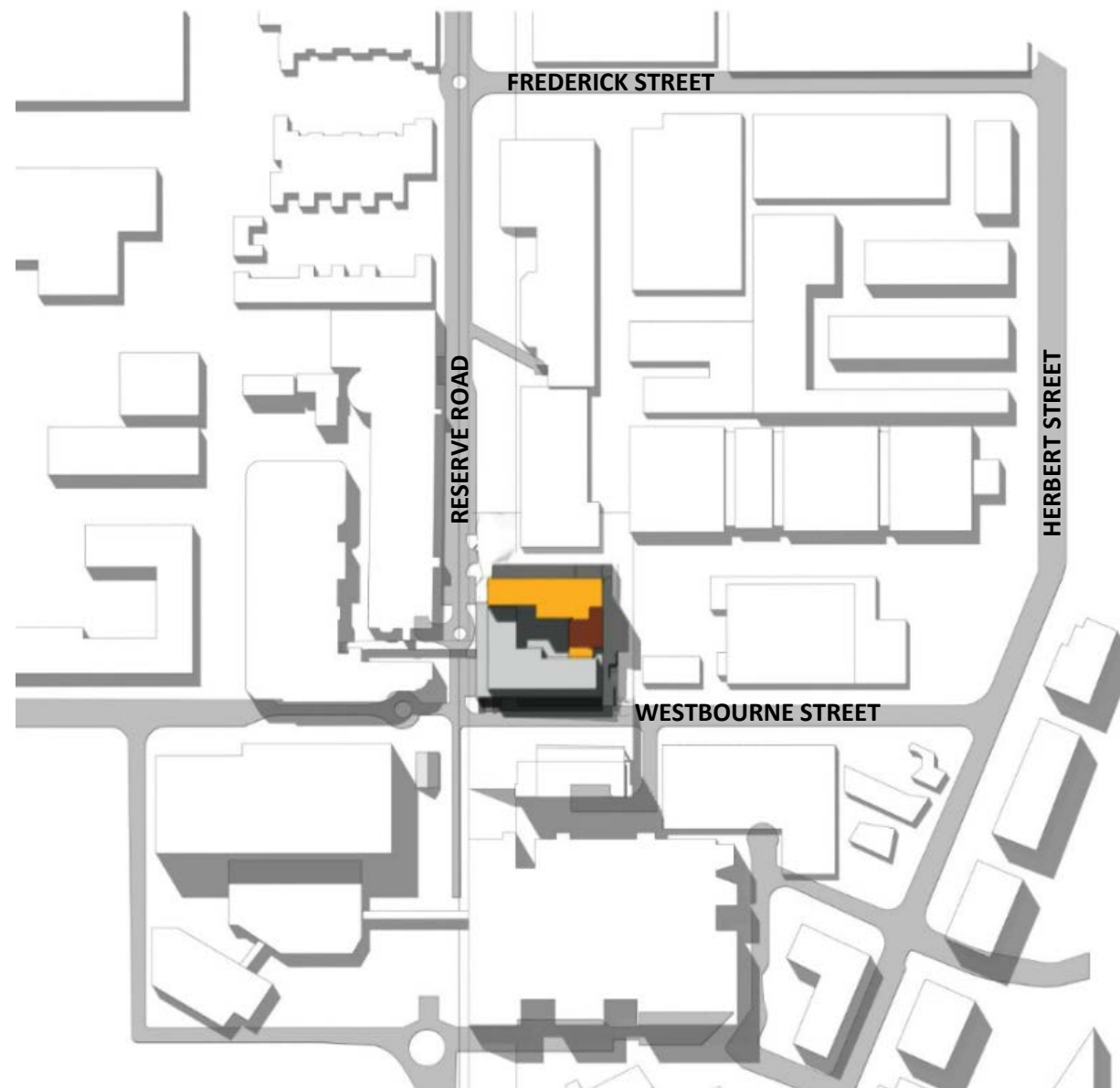
3.10 WIND & ACOUSTIC IMPACT

Being located at the top of a hill the site currently experiences wind from the north east (summer) and the south west (winter). The proposed forms will provide a level of vertical wind shielding with the introduction of the podium and awnings. For a detailed analysis refer to the Wind Assessment Report.

For acoustic analysis and resolutions, please refer to the Acoustic Report for a detailed examination of additional noise sources due to the proposed hospital, accommodation and ancillary services, as well as the background noise, and how any noise sources will affect surrounding properties.



Site Panorama



Site Location Diagram

LEGEND

- TOWER B
- TOWER A + PODIUM

4.0 SUMMARY

The key objective of the proposal is to seek approval of a concept design and envelope that will allow the development of integrated health related accommodation, services and clinical facilities within the Royal North Shore Hospital Precinct and maximise the range and breadth of services available to the local community.

This proposal has undertaken site analysis and detailed studies to test and illustrate the extent of impact to adjoining sites and within the site itself. The conclusion is that due consideration has been given to these issues and that the proposed envelope has been shaped accordingly. The segmented nature of the envelope will allow a variety articulation and architectural expression that will allow a considered and contemporary building to be crafted.

Accordingly, the Minister's favourable consideration of this concept proposal and building envelope is sought.

DC8STUDIO

dc8 studio (nsw)
a. bay 9 level 1, 9 middlemiss steet
lavender bay nsw 2060
p. 02 9003 0633 e.info@dc8studio.com

dc8 studio (qld)
a. 30 commercial road newstead qld 4006
p. 07 3252 1188 e.info@dc8studio.com

w. www.dc8studio.com ACN 613 313 009