3.1 SITE ANALYSIS
OPPORTUNITIES AND CONSTRAINTS

LEP Control

As prescribed by the Newcastle Local Environmental Plan 2012 (LEP), the FSR for the subject site is 8:1. The total site area is 12,022sqm resulting in a maximum allowable GFA of 96,224.

The height limit designated to the site in the LEP is 90m.

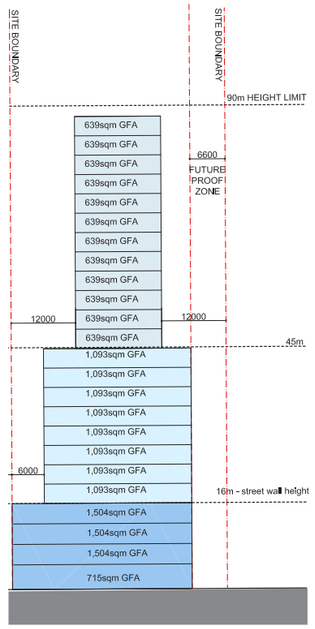
DCP Control

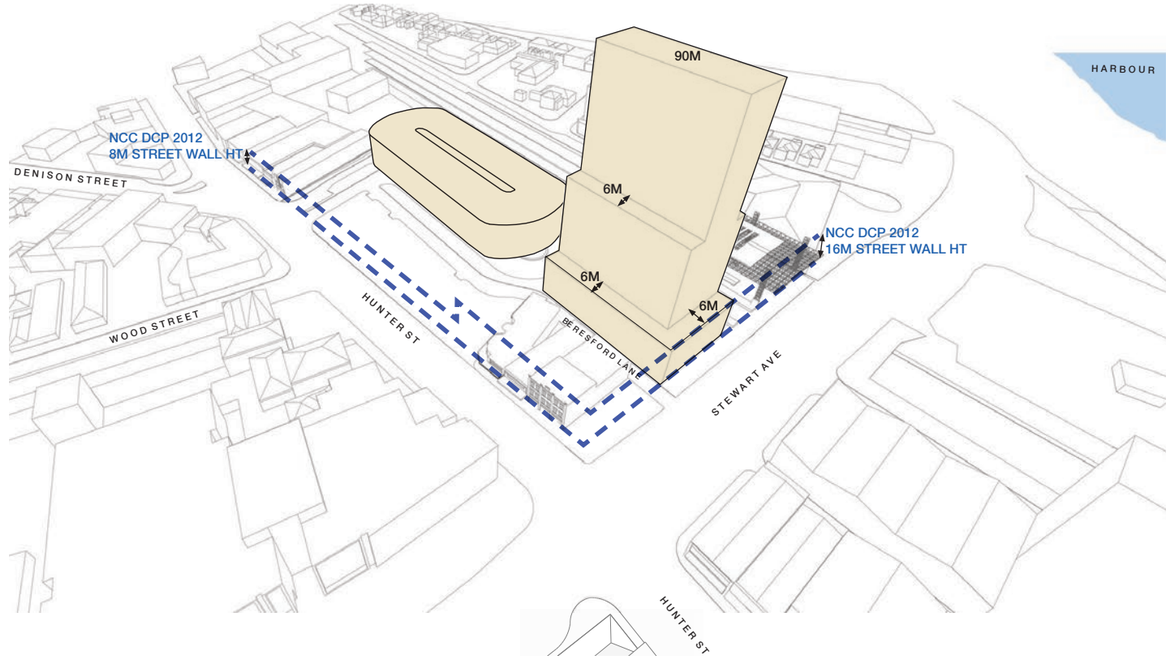
As prescribed by the Newcastle Development Control Plan 2012 (DCP2012), the site is subject to a number of built-form controls.

The DCP prescribes a generic streetwall height across Newcastle of 16m. The Store site has a site-specific streetwall height control along Hunter Street of 8m & 16m along Stewart Avenue.

Above the streetwall height the DCP requires a setback of 6m. Side & rear setbacks are to be nil up to 16m in height and should setback 6m above streetwall height up to 45m and 12m above 45m in height.

The DCP does allow for variation to this control and is described in an alternative solution as: *"The street wall height of new buildings may vary if the desired future character is to maintain the existing street wall height of neighbouring buildings, such as heritage streetscapes"*

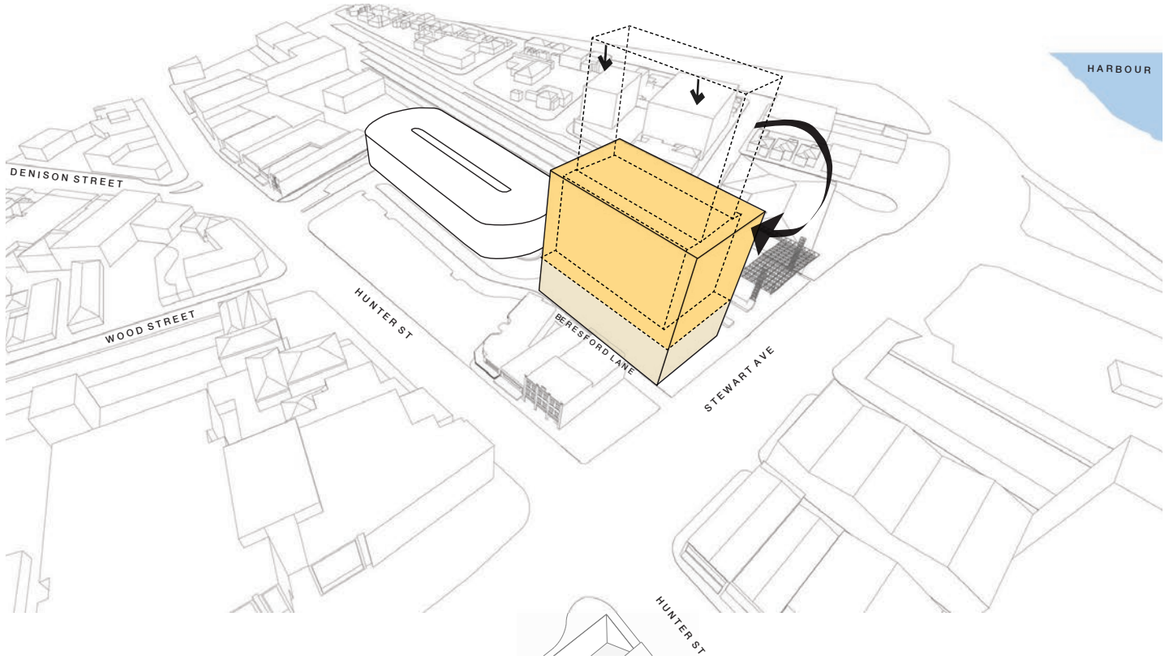


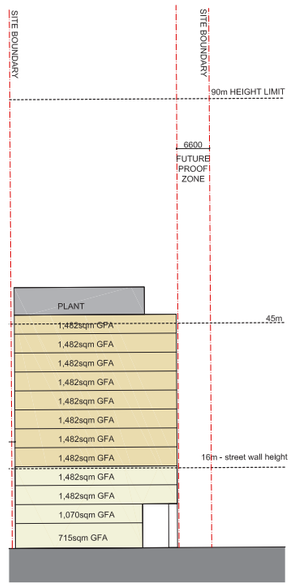


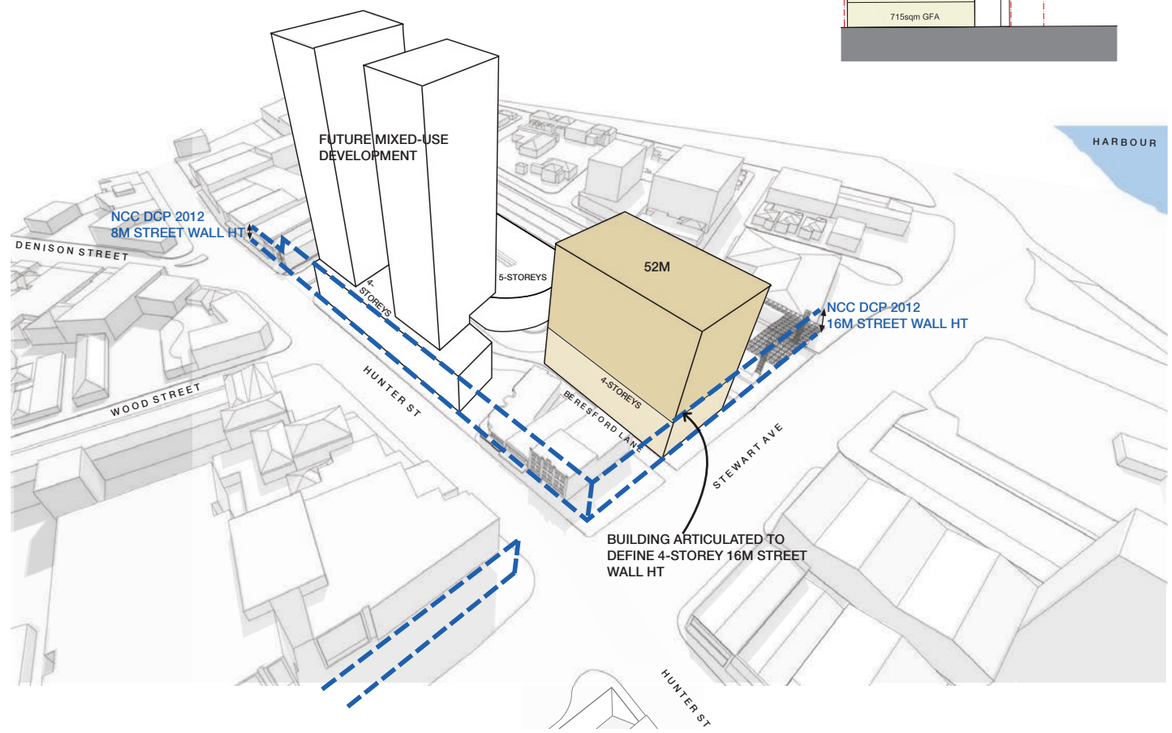
ENVELOPE ESTABLISHED TO COMPLIANT DCP SETBACKS AND MAXIMUM HEIGHT

Desigining to a compliant envelope within the maximum LEP height limit of 90m allows the building to achieve a total of 21,600sqm GFA, equivalent to 1.8:1 FSR. This suggestive massing creates impractical and small floorplates which are not commercially viable.

3.1 SITE ANALYSIS







REDISTRIBUTE FLOOR AREA / REDUCE BUILDING HEIGHT

By reducing the height of the building envelope and redistributing areas to lower floors, this reconsiders the DCP setback constraints and allows the building to accommodate minimum floorplate size of 1480sqm GFA. Floorplates of this size are widely accepted as highly feasible to contemporary office market.

PROPOSED BUILDING ENVELOPE

The proposed building envelope, with reference to the proposed Concept Masterplan submitted together with this Development Application, has been considered as an improvement to the urban design by responding to the street wall height, creating an appropriate scale immeasurable with Newcastle's vision for major civic centre for the city.

NEWCASTLE CIVIC BUILDINGS

LOCAL CIVIC BUILDINGS

An analysis of existing significant civic or commercial buildings in Hunter Street. This discovery of similarities were observed:

- Robust civic buildings
- Meets the ground
- Horizontal articulation
- Classical order
- Scale
- Regular fenestration
- Permanent/enduring

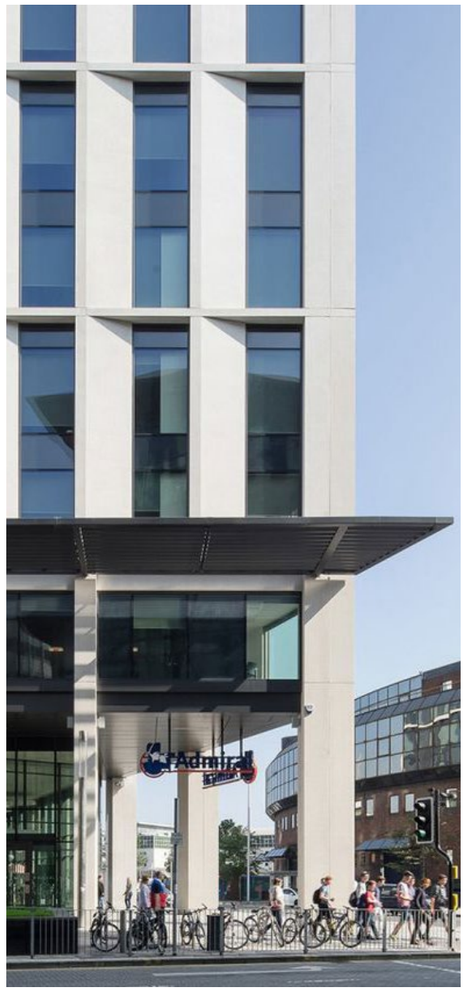
BATESSMART. DOMA

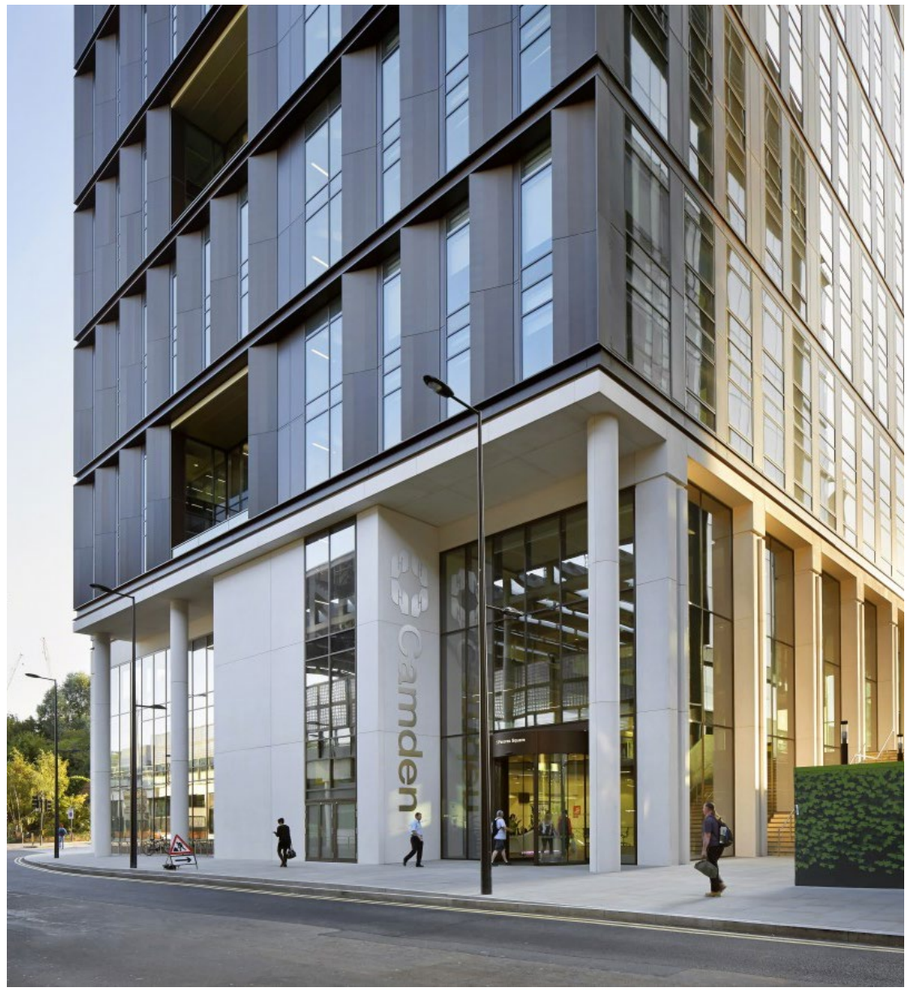
EXAMPLES OF OTHER CIVIC BUILDINGS

INTERNATIONAL CIVIC BUILDINGS

A study was conducted on other Civic Buildings internationally, to understand various other approaches to creating successful civic buildings that are more contemporary.

All exemplars ‘landed’ the building to the ground with dominant expressed columns. Civic buildings are generally defined through regular order and sense of meeting the ground. Base can be articulated through colonnades and awnings to provide weather protection. Materials are robust and have an enduring quality.



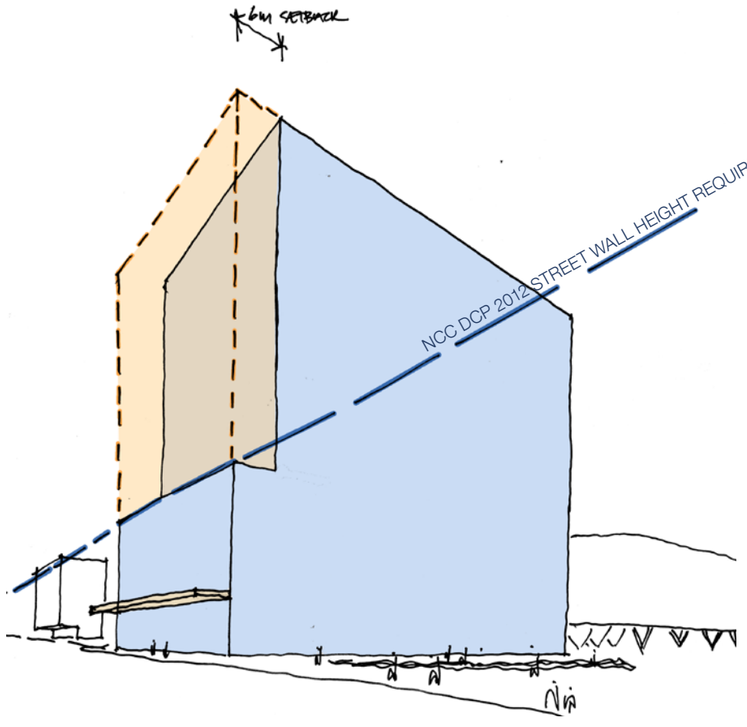


5.0 DESIGN APPROACH
MASSING

DESIGN APPROACH

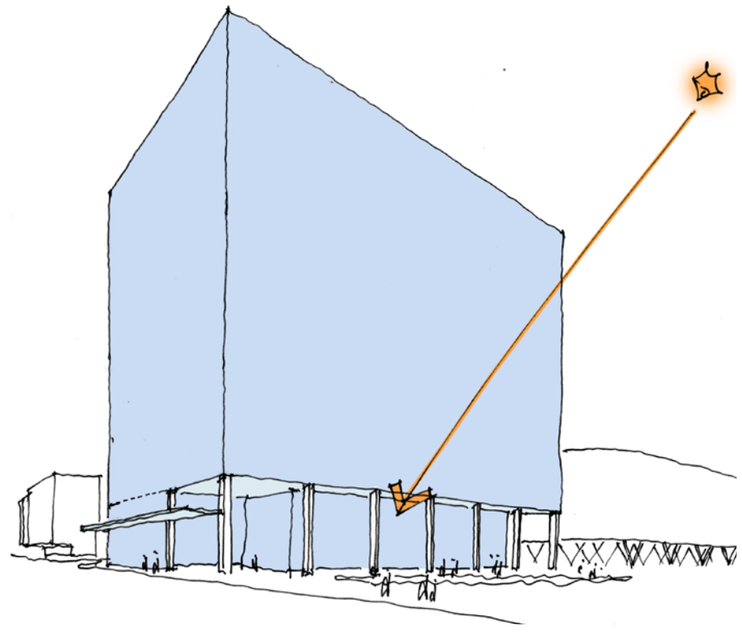
The following set of diagrams describe the design approach for the building.

- DCP Massing relative to the 16m Street wall height and DCP setback.
- Ground Plane articulation and interface with Public Domain allowing the building to come to ground.
- Horizontal building articulation and alignment with existing and proposed buildings.
- A facade design that considers regular finestration.
- Strong environmental consideration including horizontal and vertical sunshading as a response to its orientation.



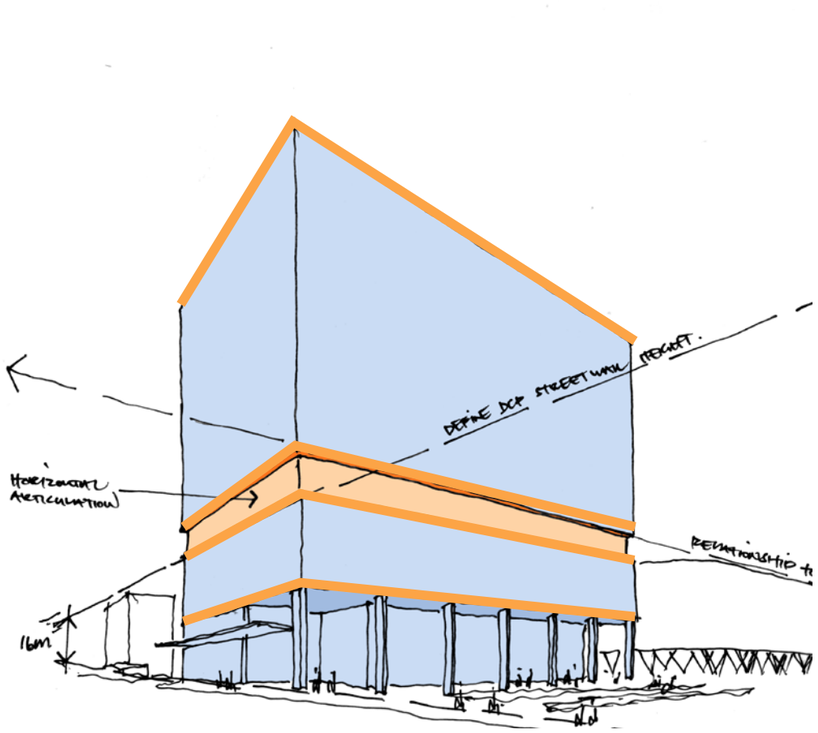
DCP MASSING

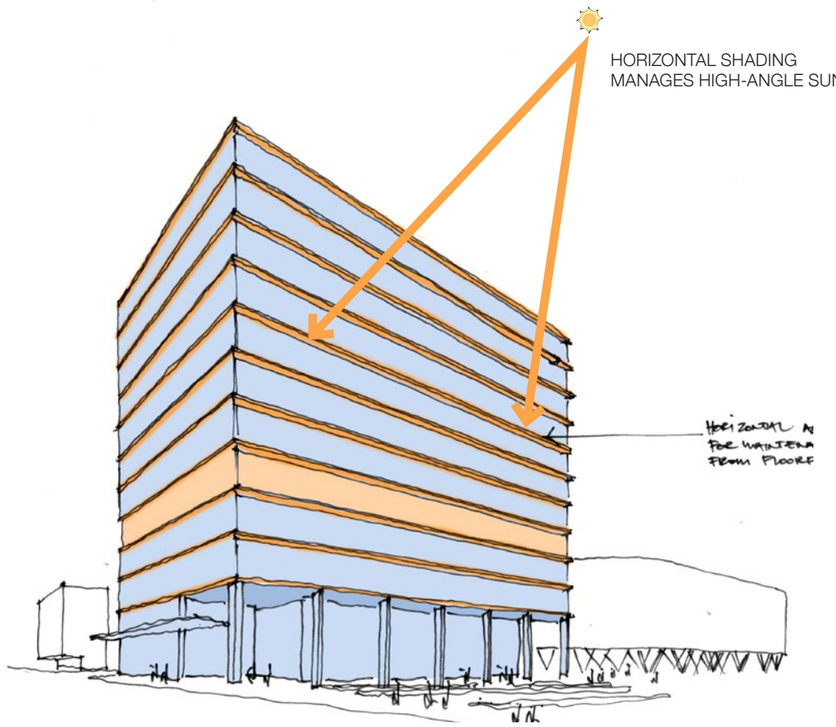
/ DCP prescribes a built-form massing of a podium (16m) with a tower setback 6m over.
/ Achieves minimum 1,400sqm NLA floorplates to meet tenant brief.
/ Considers a consistent scale of building footprint to surrounding context.

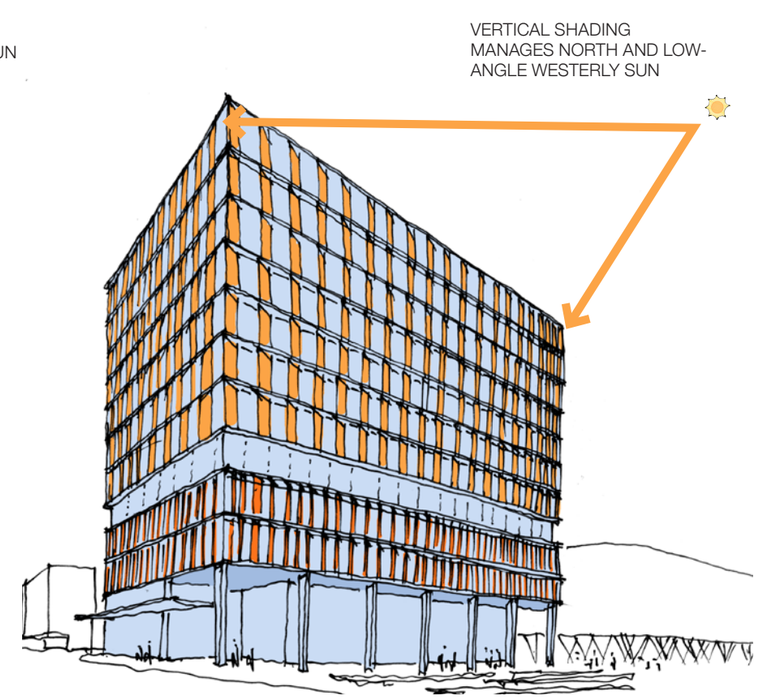


GROUND PLANE ARTICULATION

/ Creation of podium and colonnade to the base to enhance permeability.
/ Responds to scale and context fronting onto Newcastle Transport Interchange and Lightrail.
/ Creates Sheltered through-site link, legible building entry and identity.
/ Creates human scale at ground level.







BUILDING ARTICULATION

/ Articulates the building to respond to the 16m streetwall height, adjacent existing and future development.
/ Creates two dynamic built form of varying scales.
/ Retains street alignment

LINEAR EXPRESSION

/ Introduction of north facing horizontal ledge for facade maintenance and solar shading as a response to the brief.
/ Wrapping the building with horizontal expression
/ Emphasizes the horizontality of the building, similar to various Newcastle civic buildings.

FACADE

/ Adds Vertical shading to the North, yet retaining views out.
/ Adds Vertical shading to the East and West to maintain views out and create solidity to respond to low-angle sun in the morning and afternoon.
/ Regular finestration and order, similar to various Newcastle Civic Buildings.

6.0 DESIGN DESCRIPTION
GROUND PLANE

GROUND PLANE

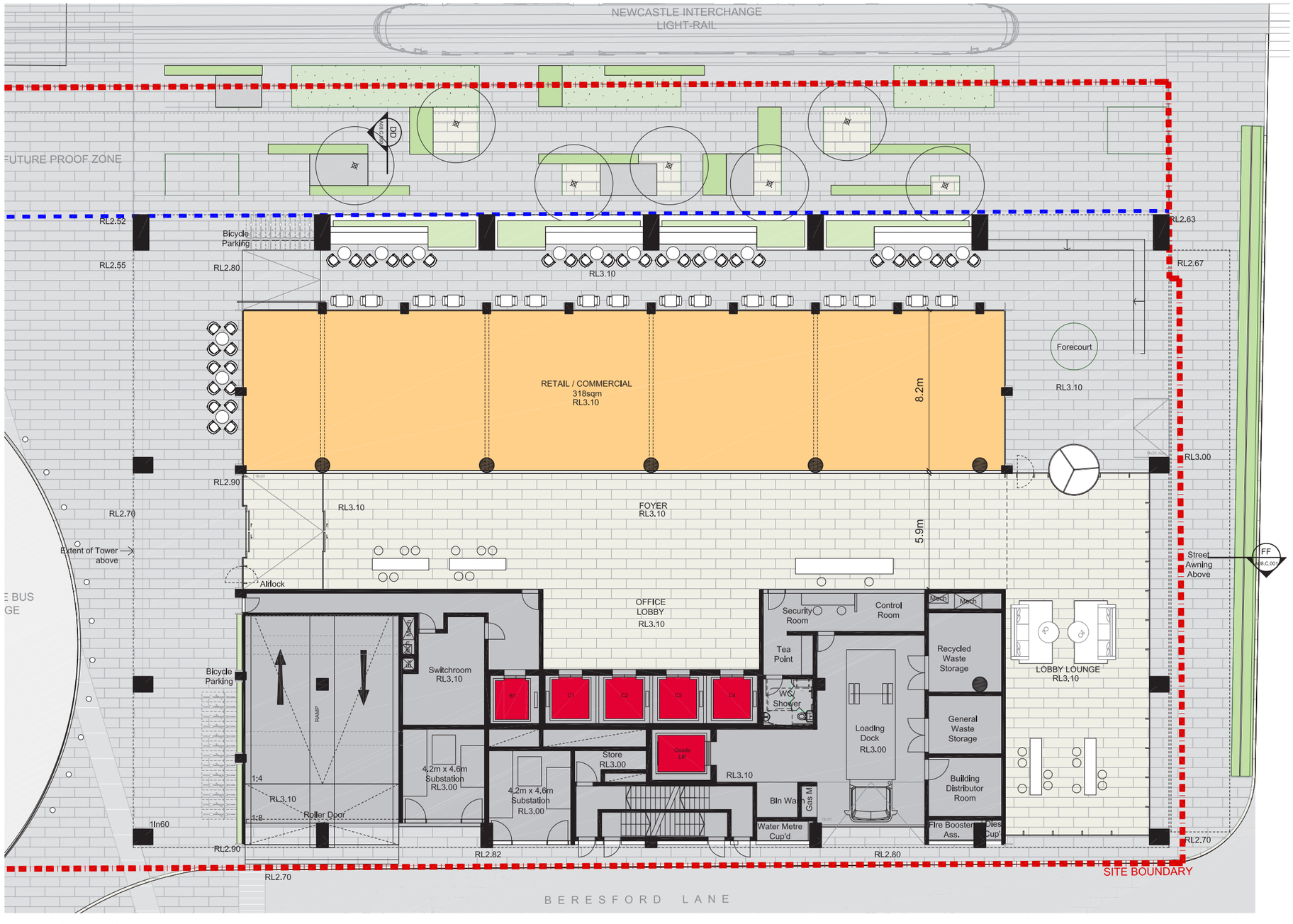
The proposed commercial building will have a strong identity fronting Stewart Avenue and will act as a gateway to the Newcastle Bus Interchange for those travelling from the East. The two building entries at Ground level create a through-site link and aim to maximize permeability and connectivity to the site between Stewart Avenue and the Newcastle Bus Interchange. To create a sense of identity on the Stewart Avenue frontage, a two-storey lobby is proposed to bring transparency for users and pedestrians travelling northbound, so as to soften the corner between Stewart Avenue and Beresford Lane as the building comes to ground.

Fronting the future light rail and Newcastle Transport Interchange immediately to the north,, the colonnade is designed to accommodate two rows of outdoor seating to the ground level retail , with a 2m wide walkway for pedestrians. A forecourt to the north-eastern corner of the ground floor provides outdoor seating and landscape that aims to soften the harsh edge of the building interface to the light rail and transport interchange.

The finished floor levels of the retail and commercial lobby entry have been established through meeting the desired minimum 100 year flood level of RL 3.10, which includes 500mm of freeboard and other constraints such as existing levels and service access requirements.

A landscaped living wall along the western interface is proposed where 20 external visitor bicycle parking spaces are provided.

To the rear of the building fronting Beresford Lane are ramp access to the Basement Carpark, two surface chamber substations, Egress Discharge from the Commercial Building, multiple service cupboards and a Loading Bay for Service Vehicles and temporary Courier Parking.



GROUND FLOOR PLAN

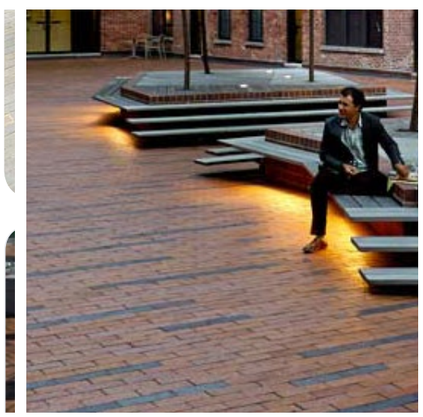
BATESSMART. DOMA

LOBBY ENTRY AND FORECOURT

FORECOURT

As the building meets the ground, the Forecourt is designed to accommodate landscape and outdoor seating as a means to soften the strong edge of the building coming to ground and it's immediate interface to the light rail and transport interchange.

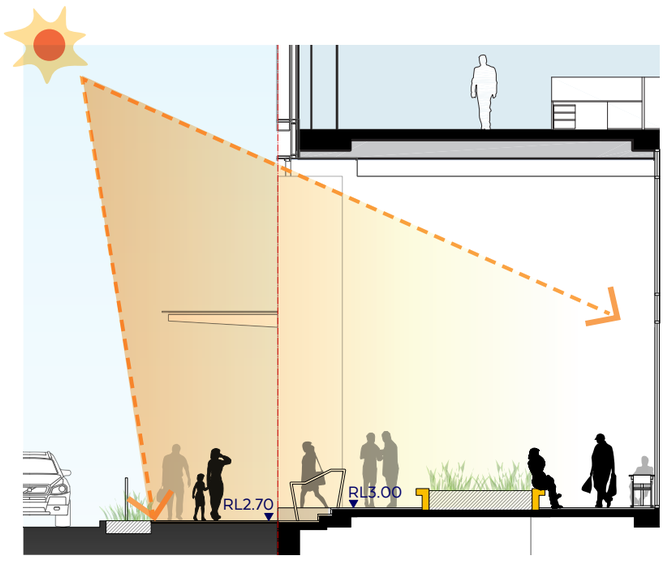
LOBBY CONCEPT SKETCH



PODIUM FRONTING STEWART AVE.

STEWART AVENUE ENTRY

The building entry at Stewart Avenue creates a through-site link and aim to maximize permeability and connectivity to the site and into the Newcastle Bus Interchange. To create a sense of identity on the Stewart Avenue frontage, a two-storey lobby is proposed to bring transparency for users and pedestrians travelling northbound, so as to soften the corner between Stewart Avenue and Beresford Lane as the building comes to ground.



EAST-WEST SECTION

INDICATIVE LOBBY VIEW FROM STEWART AVE.

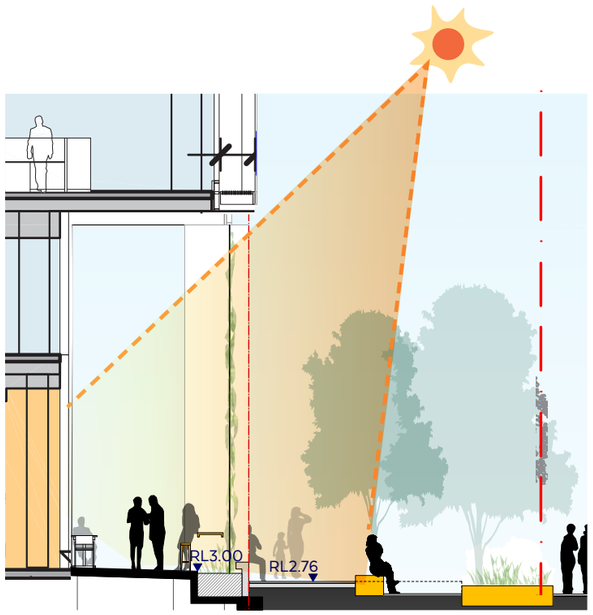
PUBLIC DOMAIN AND LIGHT RAIL

LIGHT RAIL INTERFACE

Fronting the existing and future light rail, and Newcastle Transport Interchange immediately to the north, the colonnade is designed to accommodate two rows of outdoor seating to the ground level retail , with a 2m wide walkway for pedestrians.

Low level planting acts as a subtle delineation from the public domain and outdoor seating as the building interfaces with a temporary landscaped zone, which is intending to be converted to an additional future light rail.

The future light rail zone (FLR) is a ‘no-build’ zone to the north, whereby any component of this building, including facade maintenance and solar shading for the entire building is prohibited to oversail into this zone in order to comply with the TFNSW requirement.



NORTH SECTION

INDICATIVE VIEW FROM FUTURE LIGHT RAIL

PODIUM ADJACENT BERESFORD LANE

BERESFORD LANE INTERFACE

The podium corner the fronts Beresford Lane and the future Cooper Plaza has a huge role in strengthening the corner of the the commercial building and to meet the ground.

The carpark entry and loading dock roller shutters are setback to create a darker infill to the base of the building, with louvres outside the substation and egress discharge as a lighter infill to the dark metral frame facade that hits the ground.

Potential green living walls aim to soften the edge of the podium building as this integration forms part of a language that responds to the proposed landscaping within the public domain.

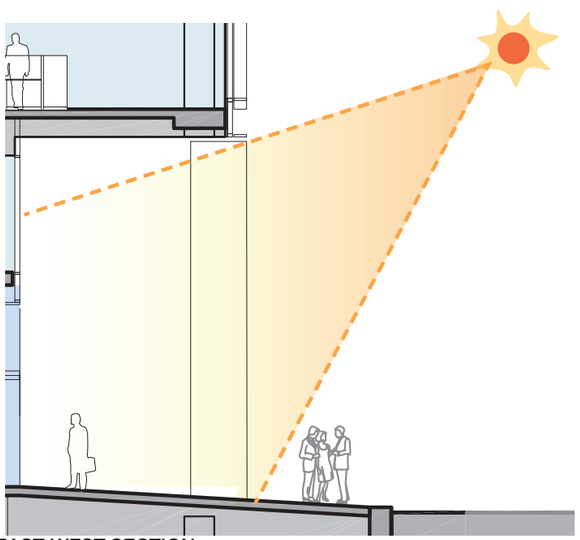
INDICATIVE VIEW FROM BERESFORD LANE.

PODIUM FRONTING BUS INTERCHANGE

BUS INTERCHANGE INTERFACE

The podium fronting the Newcastle Bus Interchange has a slight cross-fall in all directions. The design of the lobby entry being elevated from the NBI is partly driven by the requirement to design above the 100 year flood level of RL3.10, but also to create a visible entry from the interchange, as well as pedestrians walking down the future plaza fronting Hunter Street.

The proposed masonry vertical and horizontals form part of a site-wide concept that brings together the ground level buildings between Hunter Street, future Cooper Plaza and Interchange Square and Transport Interchange.



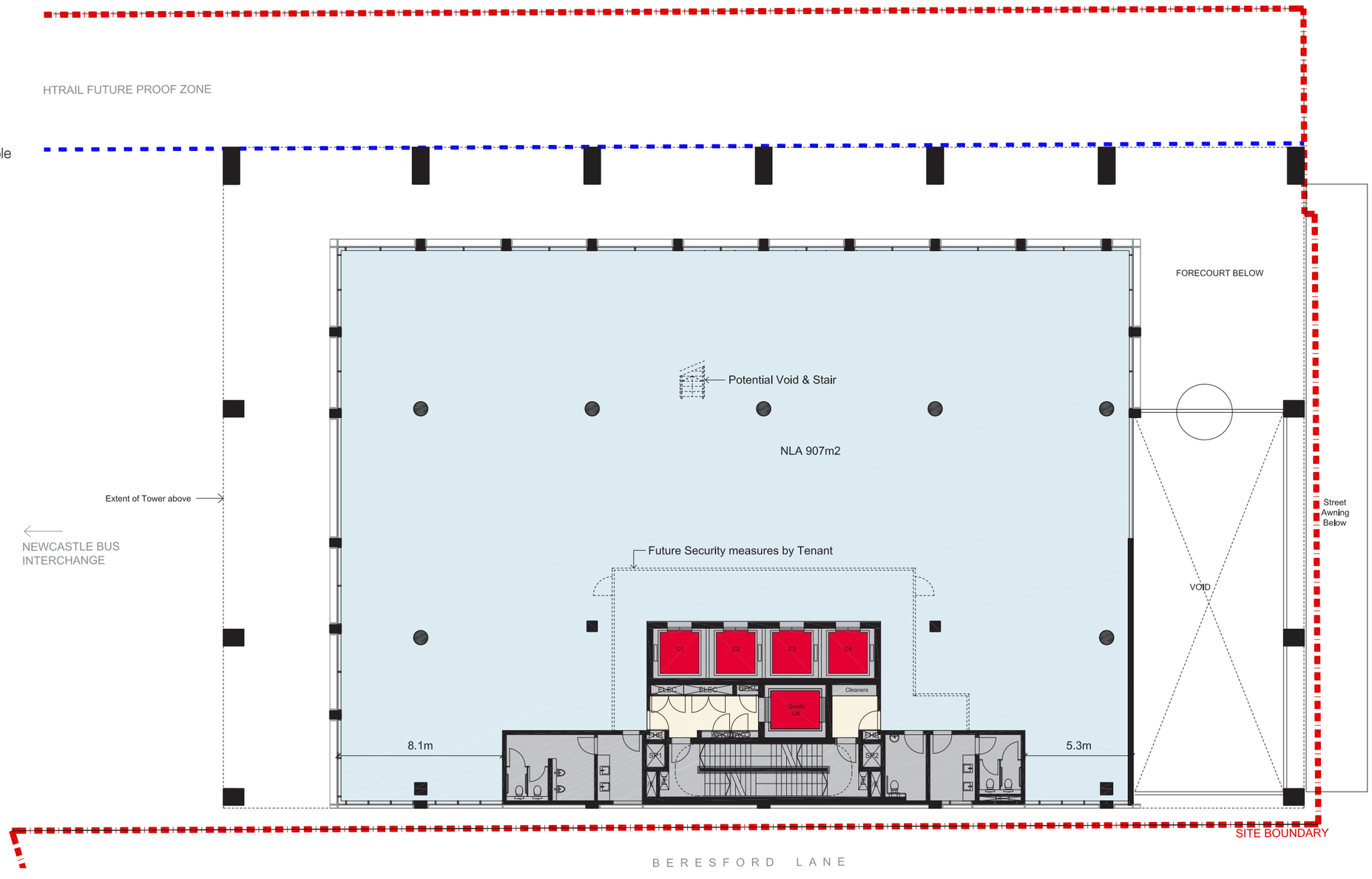
EAST-WEST SECTION

INDICATIVE VIEW FROM FUTURE INTERCHANGE SQUARE

LEVEL 01 / MEZZANINE LEVEL

MEZZANINE

The mezzanine level aims to set back from the building line to create the colonnade spaces on two sides and the double height void....



BATESSMART DOMA

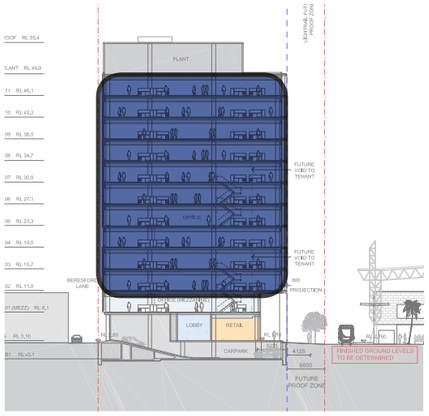
TYPICAL COMMERCIAL FLOOR

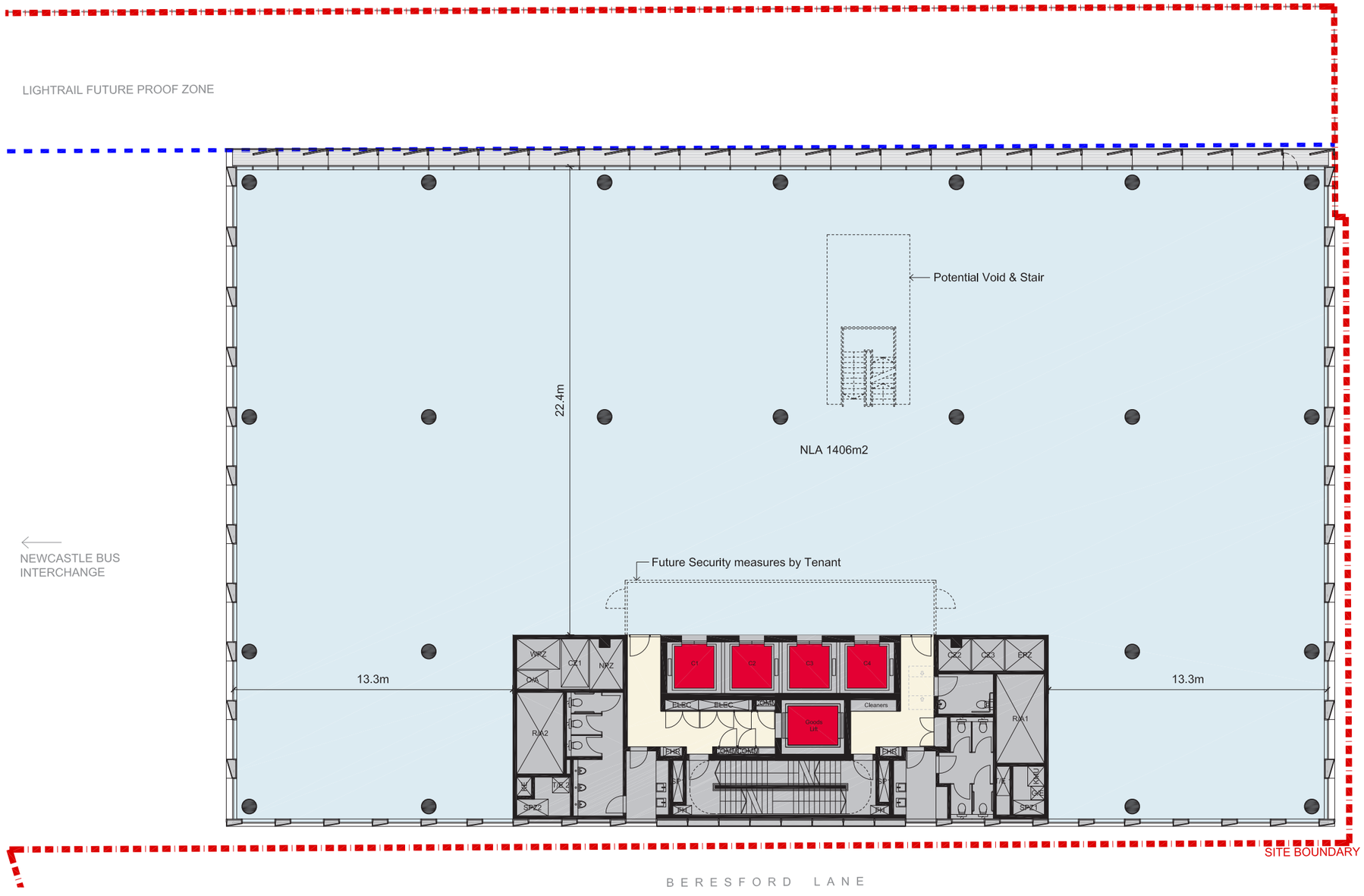
TYPICAL FLOOR PLAN (L02-11)

The typical commercial floor plan consists of a central core efficiently designed to locate all amenities and services to the southern end of the building. This area is connected directly to the main lift lobby and potential secured zone to be added in the future by individual tenants, should they be required.

Within each floor, there is a flexibility for the future tenant to add an interconnecting stair to connect with levels below or above. The structure of the building is designed to allow this to occur in multiple locations for future flexibility.

Due to a strict requirement that nothing can protrude north of the lightrail future proof zone, an 800mm deep horizontal ledge for facade maintenance accessed from the floorplate has been provided to the north for easy access. To the east, west and south is a facade zone that can easily be maintained by abseiling from the roof.





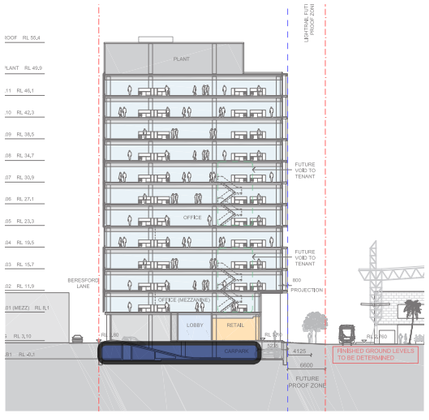
BATESSMART. DOMA

BASEMENT LEVEL

BASEMENT

The basement level consists of 40 car parks (inc. 2 accessible car parks) allocated to commercial tenants within this building. End of trip facilities including 87 bike storage will be sufficient to accommodate the population density required for this building. The basement also houses some plant and BOH areas.

The carpark ramp is dedicated for building users only. The basement shuttle lift is accessed from the commercial lobby, or via a separate corridor accessed from the western colonnade adjacent to the Bus Interchange. This access is to be used also by bicycle users for direct access into the basement bike storage area without accessing via the ground level lobby.



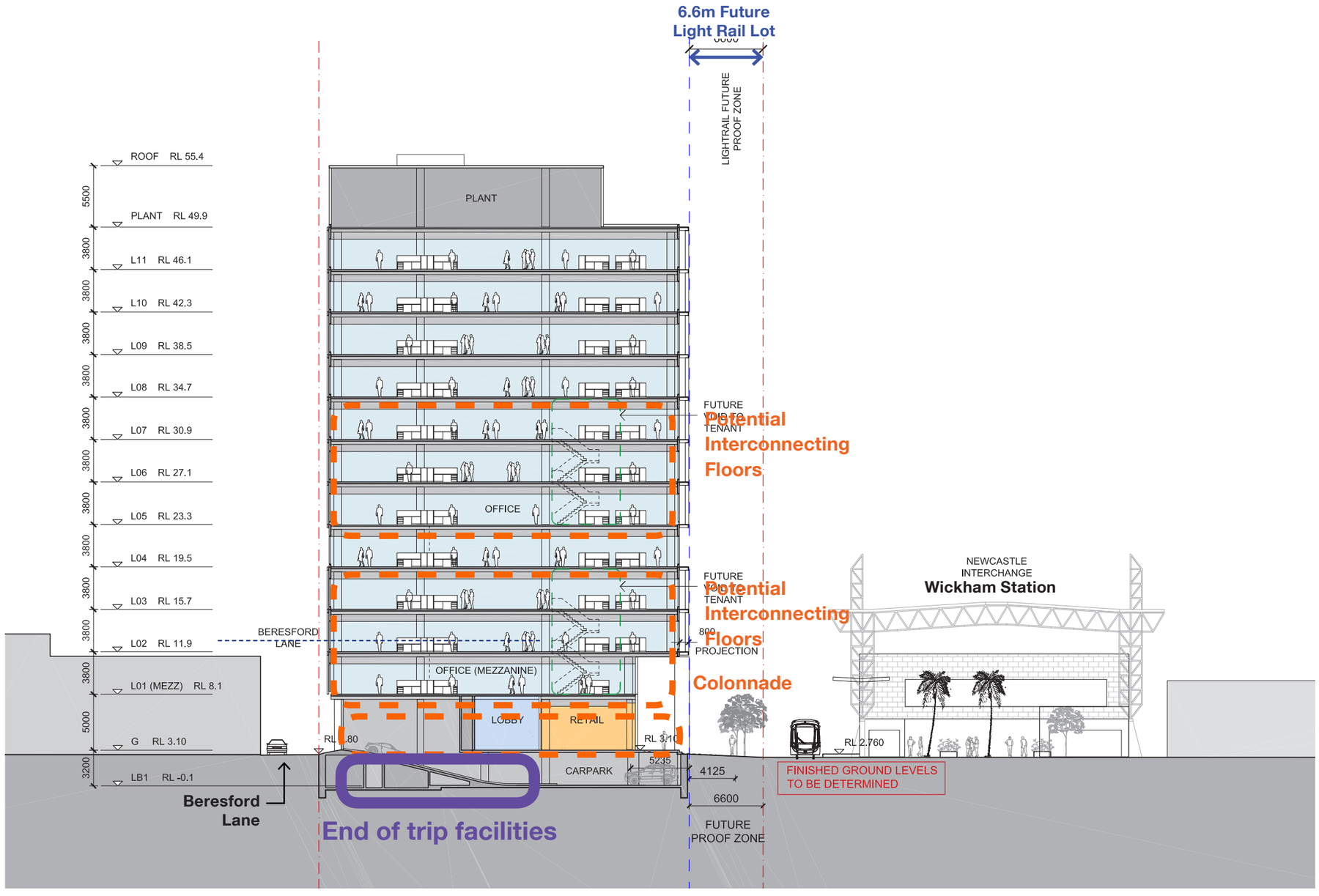
BUILDING SECTION

SECTION

The ground level lobby and retail, together with level 01 commercial are recessed from the building edge, to create a colonnade in response to the human scale and surrounding context within the public domain. L02-11 are the typical commercial floorplan, with future potential interconnecting stairs. On Level04, the facade sets back to allow for the building to be articulated and related to the streetwall height of 16m and future proposed carpark building to the west.

End of trip facilities have been provided on Basement Level with easy access directly from street without the need to enter via the main lift lobby.

The future light rail zone (FLR) is a 'no-build' zone to the north, whereby any component of this building, including facade maintenance and solar shading for the entire building is prohibited to oversail into this zone in order to comply with the TFNSW requirement.



6.1 DESIGN DESCRIPTION
ELEVATIONS NORTH AND SOUTH

NORTH ELEVATION

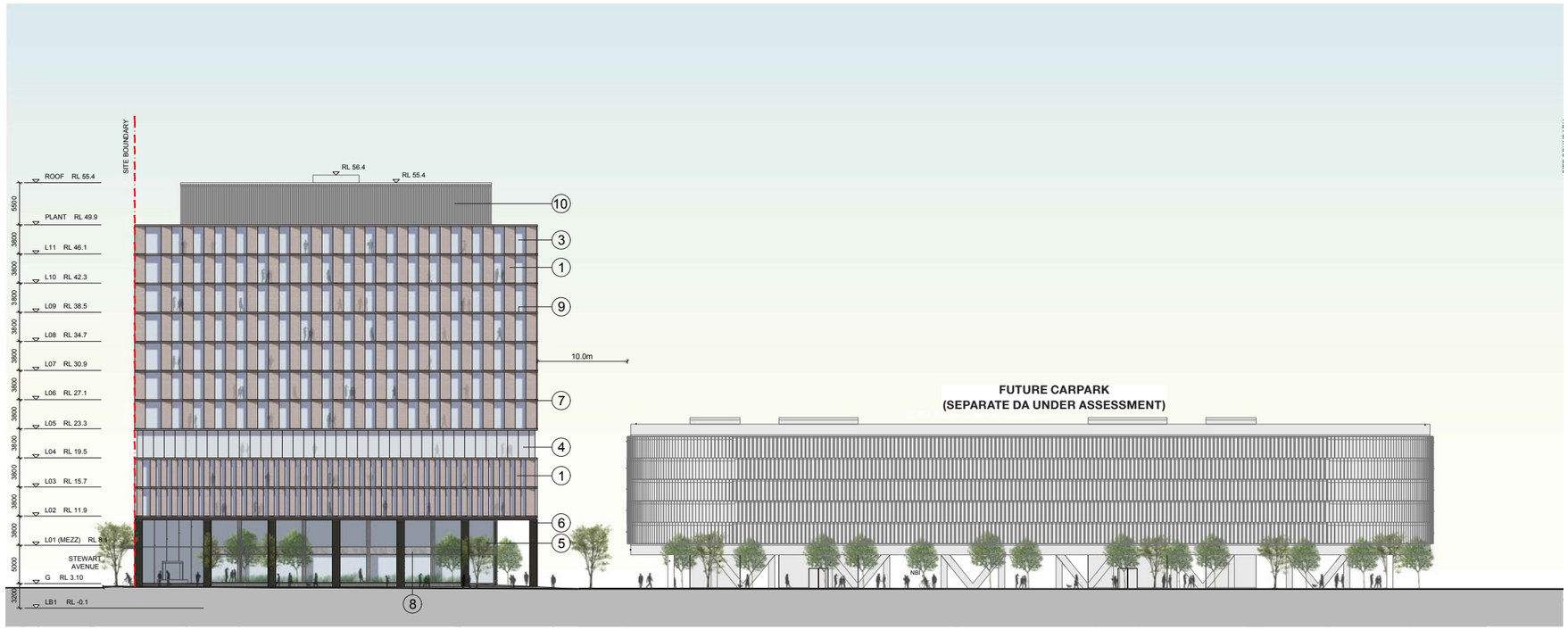
Vertical sunshade and Horizontal access ledge offer protection from the northern sun. The vertical sun shade component is made up of perforated panels to ensure views out is maintained.

The podium consists of a primary dark metal frame aligned to the building edge, with brick pier verticals and shop front glazing as infills to the retail and commercial facade.

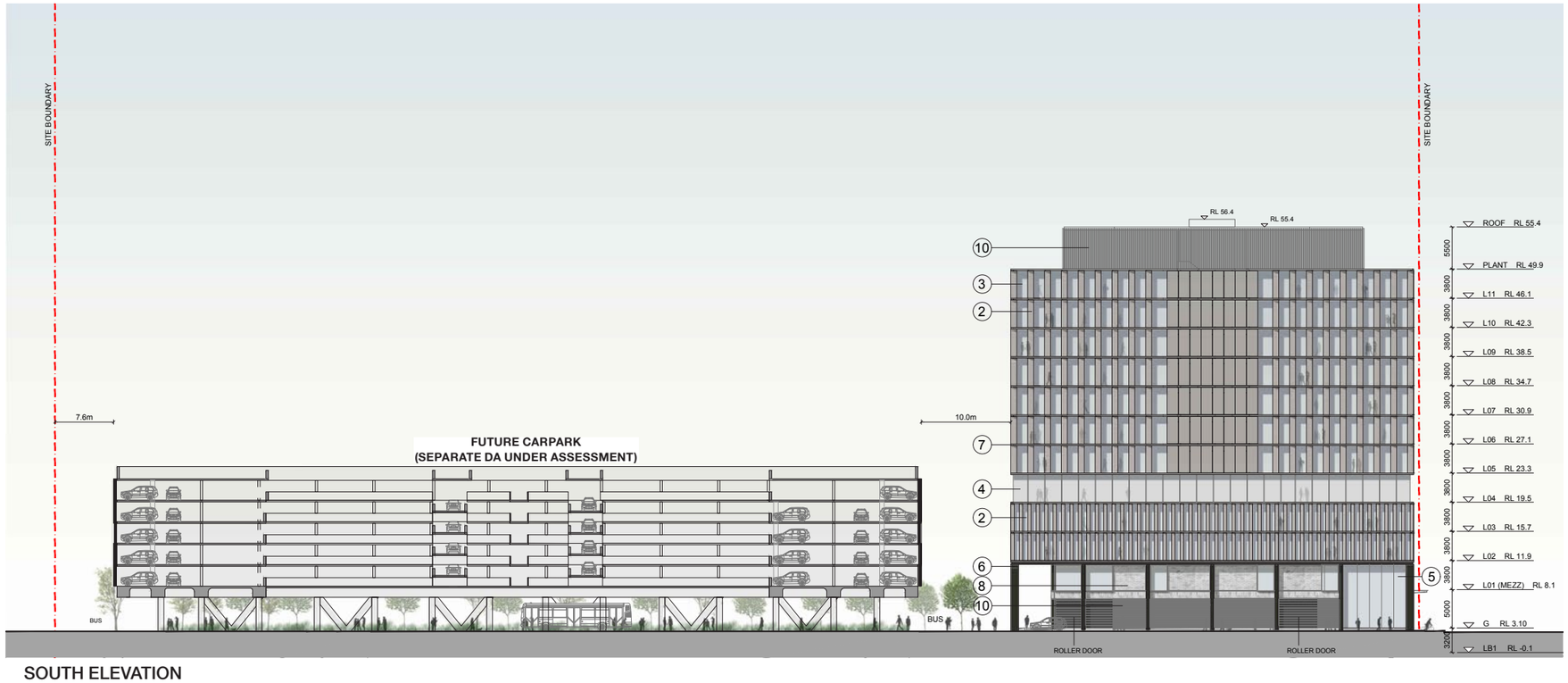
SOUTH ELEVATION

The south elevation expresses the building's core using flat sheet aluminium cladding. On either side of the core is a facade system consisting vertical and hoizontal shading that wraps into the east and west facade as a continuous language.

The podium consists of a primary dark metal frame similar to the north, and aligns to the tower above. Masonry facade becomes a second layer to the primary frame in the background, with horizontal louvres external to the substation, service cupboards and egress discharge areas.



NORTH ELEVATION



SOUTH ELEVATION

BATESSMART DOMA

ELEVATIONS EAST AND WEST

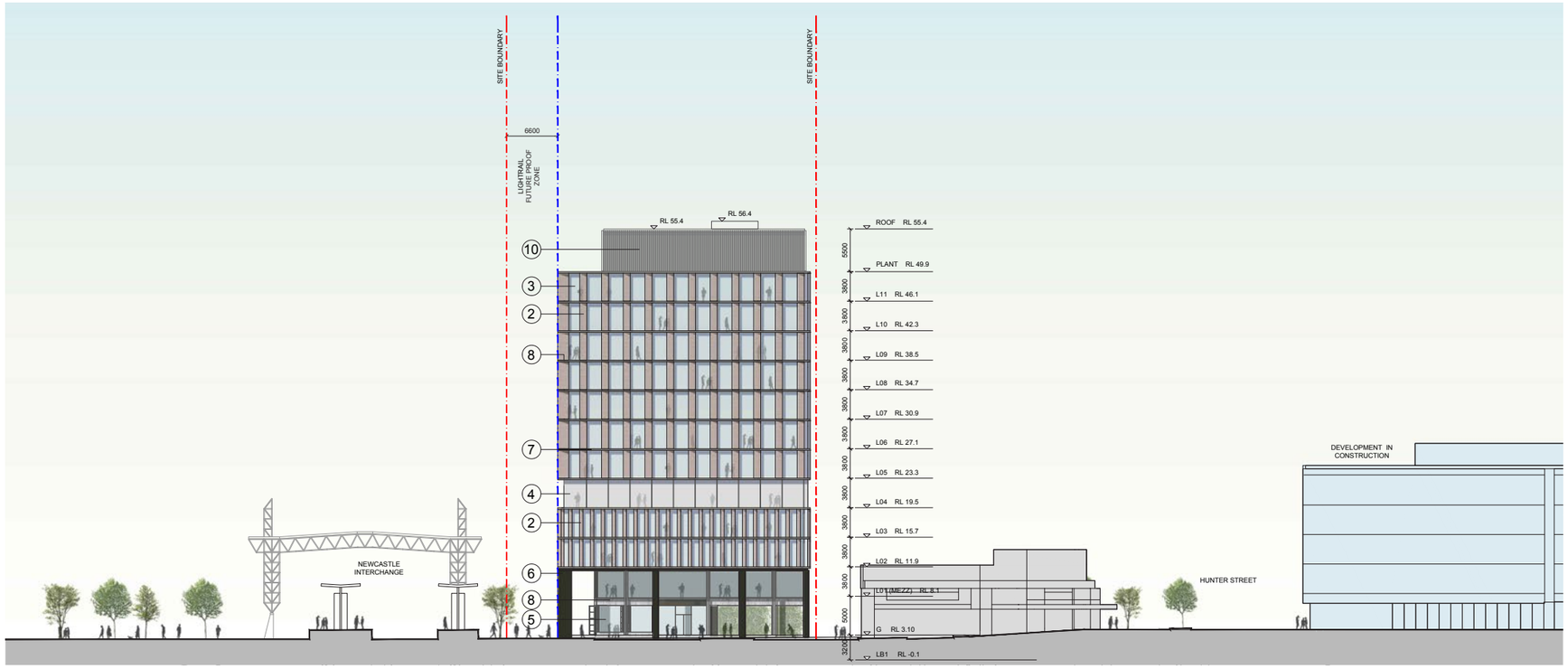
EAST AND WEST ELEVATION

East and west elevations contain similar vertical and horizontal shading to the typical commercial floors. Vertical shading adds solidity to the facade to help with low-angle sun shading in the morning and afternoon.

The podium on the east consists of a primary dark metal frame aligned to the building edge, with a recessed bay to express the main building entry adjacent to a forecourt area.

Podium on the west continues to express the language of the dark metal frame as the primary facade element, with masonry facade as a secondary layer in the background.

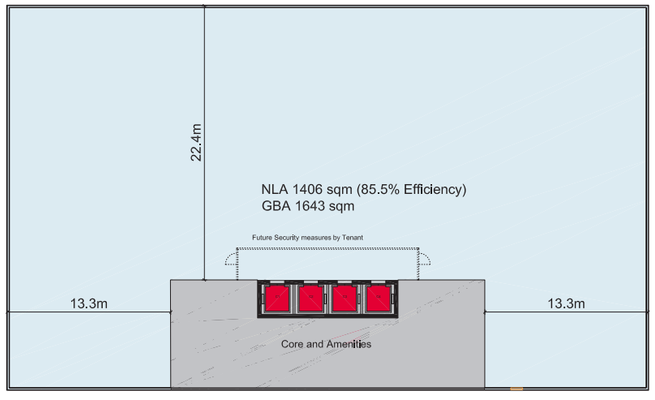
EAST ELEVATION



WEST ELEVATION

BATESSMART. DOMA

6.2 DESIGN DESCRIPTION
TYPICAL FLOORPLATE ANALYSIS



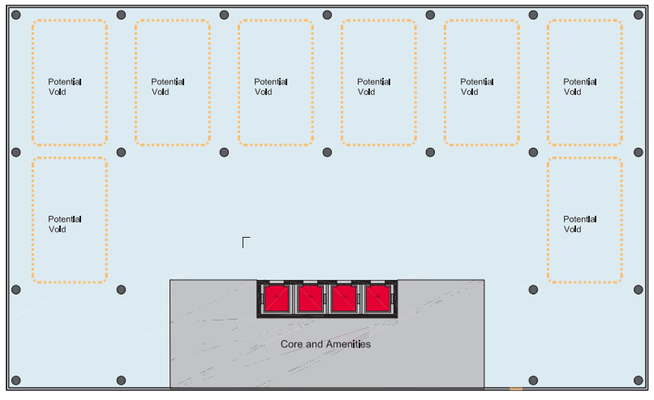
1. GENEROUS FLOORPLATE

/ 52m wide contiguous open floorplate workzone

/ encourage inter-connectivity across floor

/ maximise adaptability of workspace groups to expand or contract

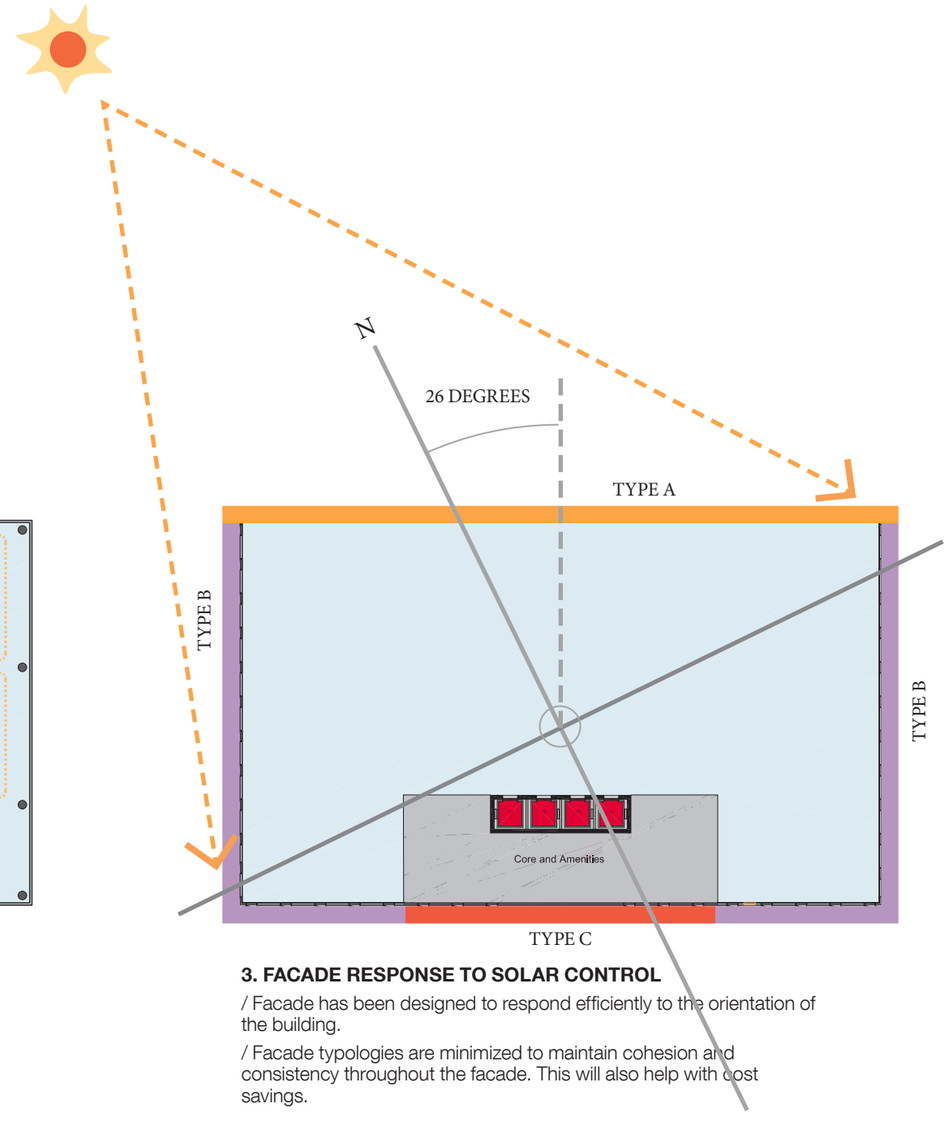
/ potential north-facing atrium over 3-storey to increase daylight penetration and create vertical connectivity between floors



2. FLEXIBLE INTERCONNECTING FLOORS OPPORTUNITY

/ create circulation between floors to create hierarchy within spaces.

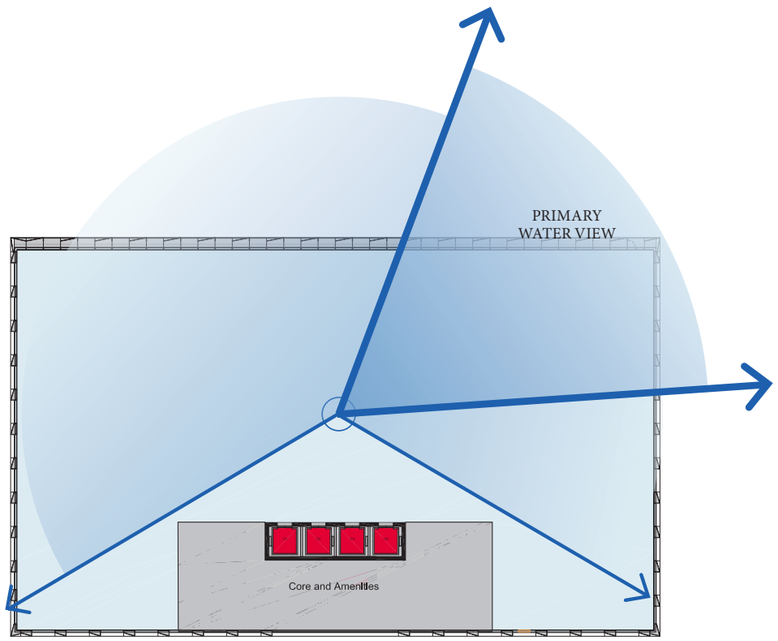
/ centrally locating these interconnecting space can improve light conditions to the central portion of the floorplate.



3. FACADE RESPONSE TO SOLAR CONTROL

/ Facade has been designed to respond efficiently to the orientation of the building.

/ Facade typologies are minimized to maintain cohesion and consistency throughout the facade. This will also help with cost savings.



2. MAXIMIZED VIEWS

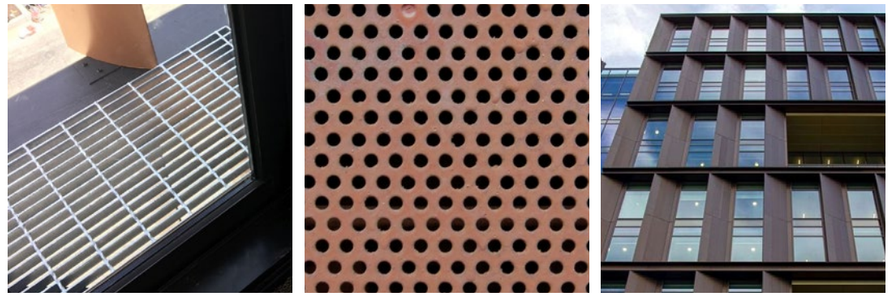
/ Views are essential to the design of this open floorplate whilst achieving sufficient solar shading.

/ Facade design considers these factors and is detailed later in this report.

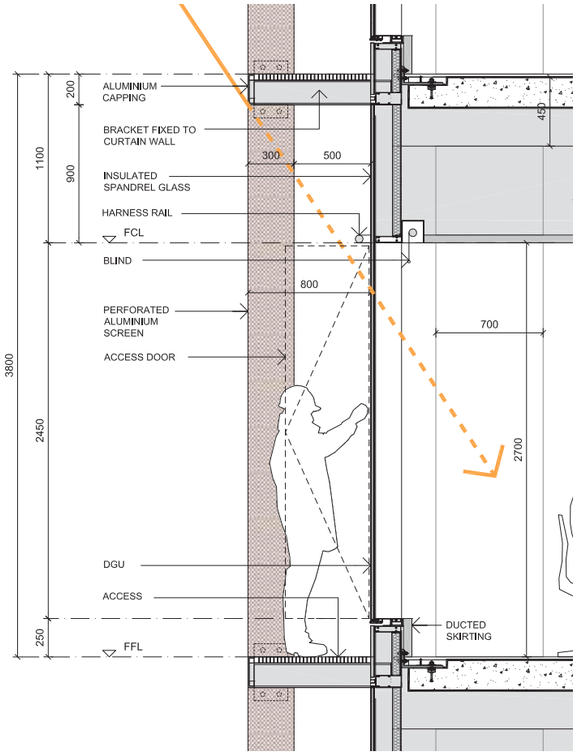
INDICATIVE VIEWS NORTH

INDICATIVE VIEWS EAST

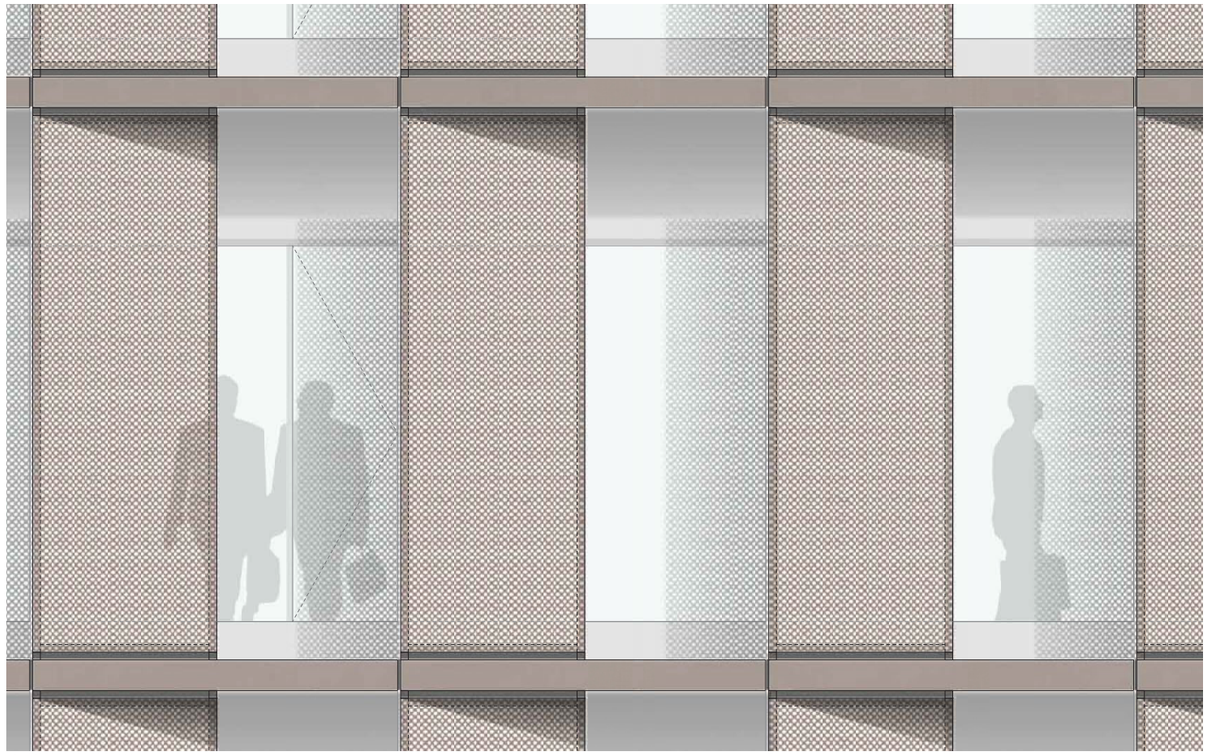
7.0 FACADE DESIGN
FACADE TYPE A



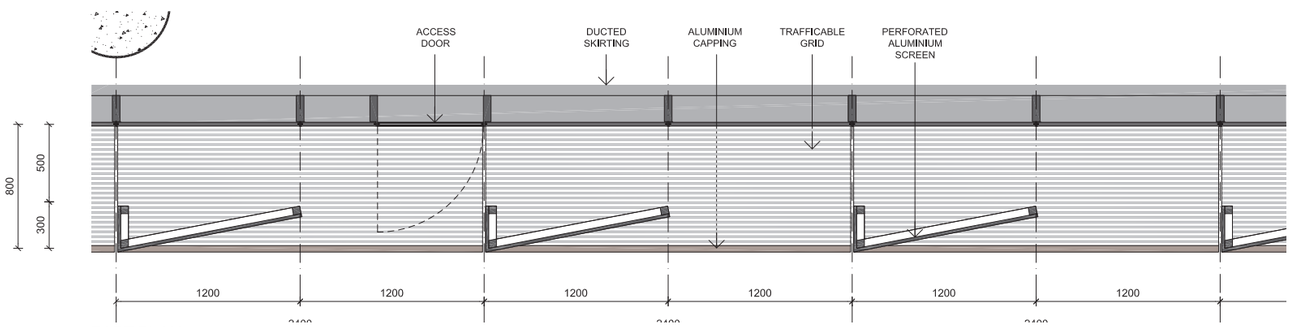
PRECEDENTS



PART SECTION



PART ELEVATION



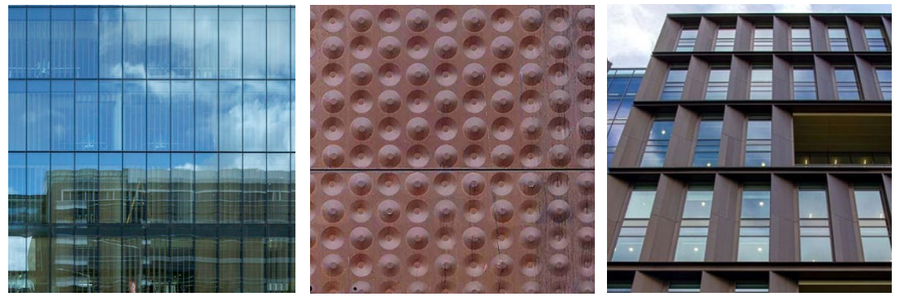
PART PLAN

INDICATIVE VIEW OF NORTH FACADE

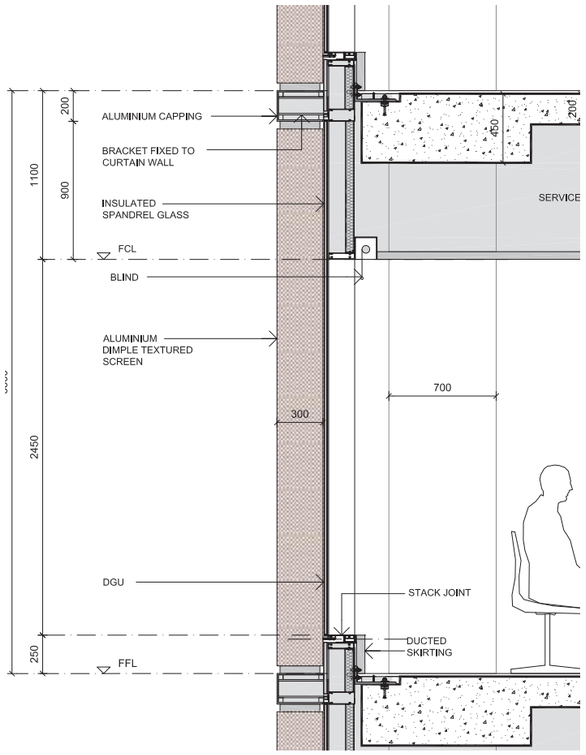
FACADE TYPE A

The north facade consists of 1200mm module curtain wall grid with floor to ceiling glass above a 250mm skirting duct perimeter zone. The external 800mm horizontal facade maintenance access ledge helps to provide sun shading and access to the facade for cleaning, with 1200mm wide external screens to the north providing additional shading, whilst retaining views out from the floorplate.

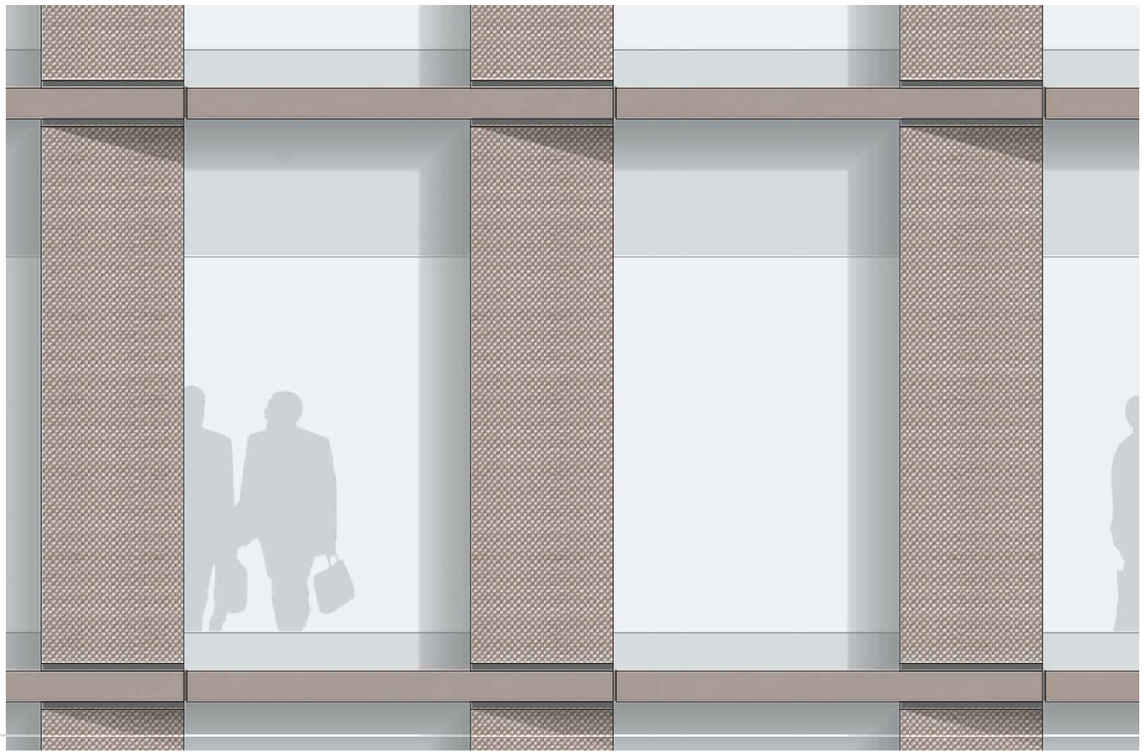
FACADE TYPE B



PRECEDENTS



PART SECTION



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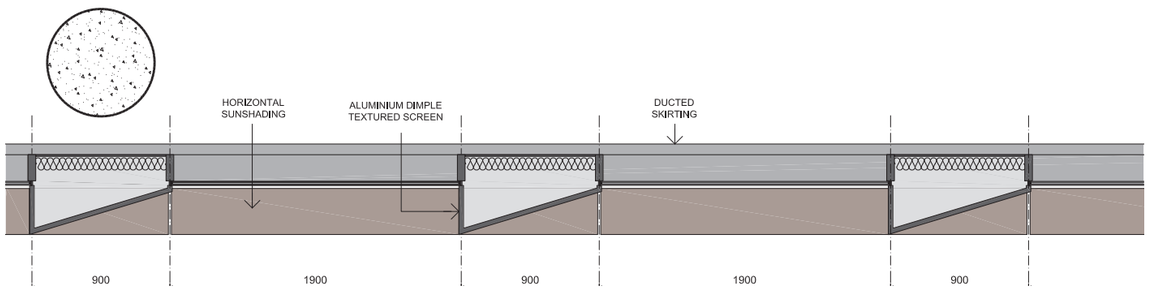


PART PLAN

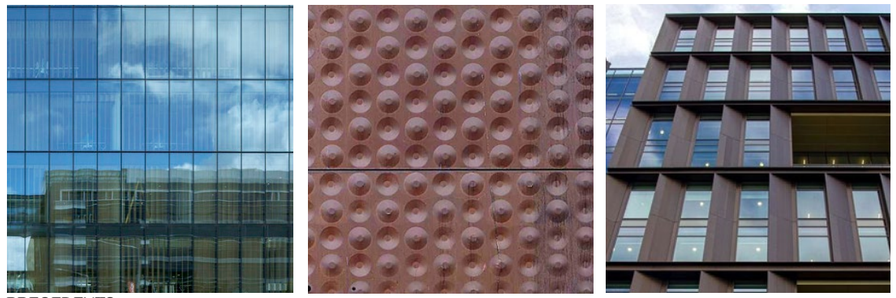
INDICATIVE VIEW OF EAST/WEST FACADE

FACADE TYPE B

The East and West facade consists of an insulated vertical spandrel within a curtain wall module to reduce heat load on facade. Every module also consists of a large Vision Glass to enable views out and adequate light in. Each level is expressed via a horizontal ledge to help with shading from high angle sun and retain the horizontal expression throughout the building.

BATESSMART. DOMA

FACADE TYPE C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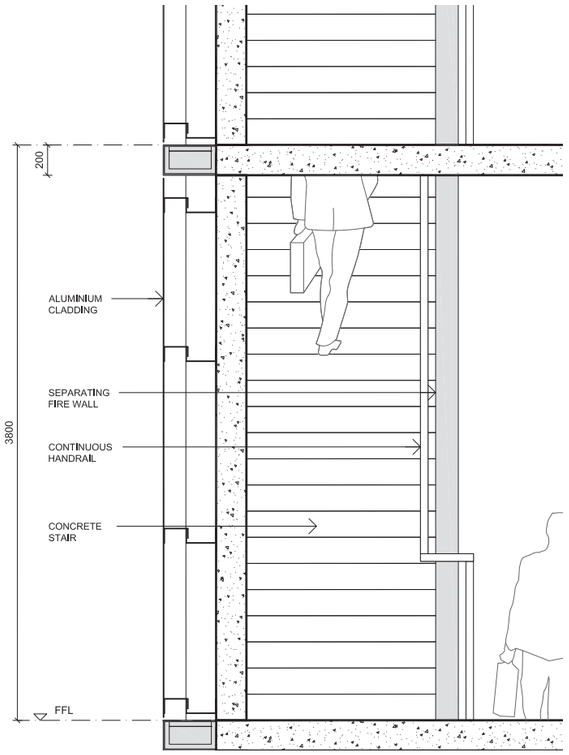
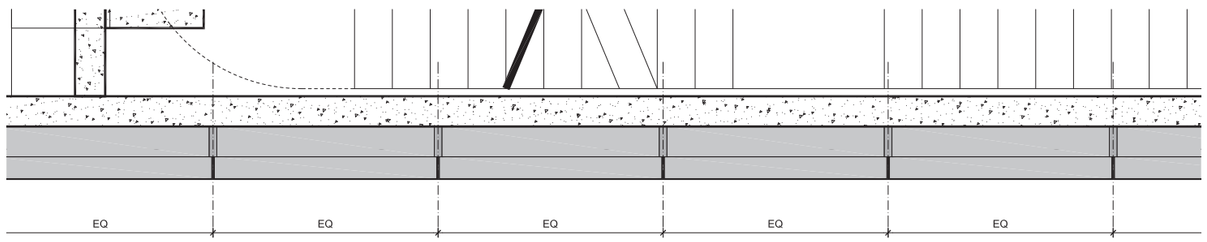


PART SECTION


PART ELEVATION



PART PLAN


INDICATIVE VIEW OF SOUTH FACADE

FACADE TYPE C

The south facade consists of 1200mm module rainscreen facade fixed to the outside of the stair core. The rainscreen is consistent aligning to the stair core through to the ground floor. It is proposed as a terminating point to Facade type B wrapping from the east/west corners to the south.