

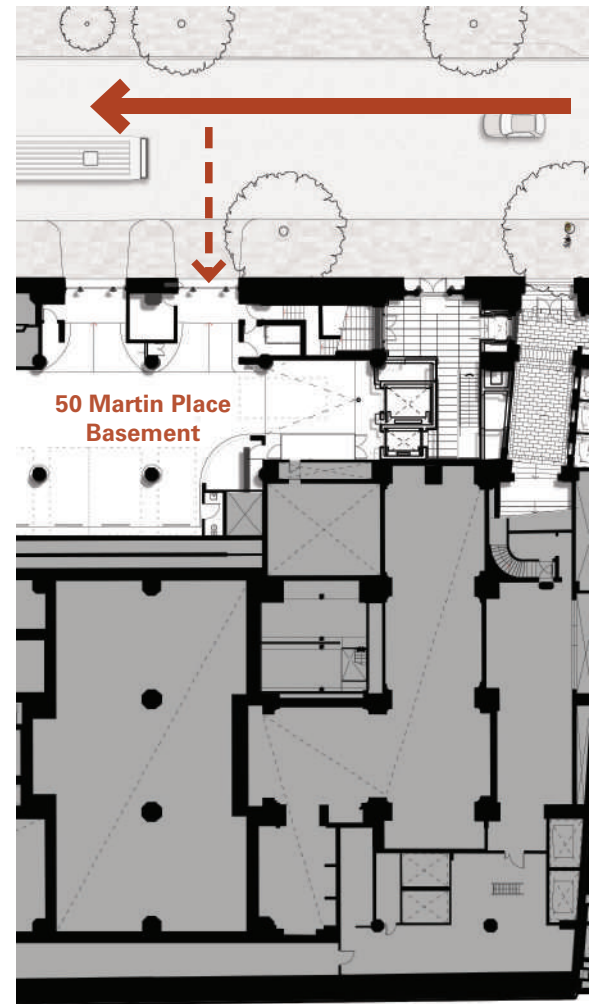
Potential locations within North Tower public domain
Per CSSI Condition

Integrated Basement and Servicing

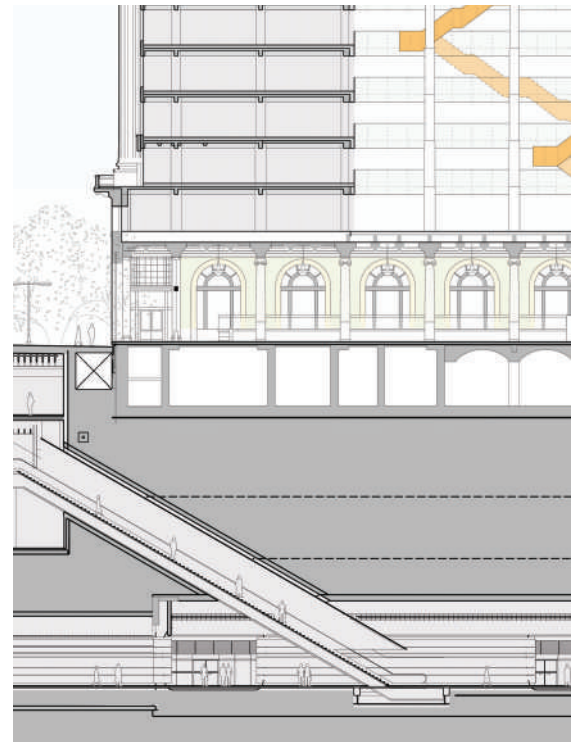
Structure and building services are comprehensively integrated and consolidated between the North Tower and Martin Place Metro station below, resulting in the creation of 'convergent' areas where the public and private elements interface, creating an enriched urban outcome and further public benefits.

Below ground, the Metro Station design on the North Site includes a station shaft accommodating technical rooms, station and staff facilities, paid and unpaid concourse areas and Metro platforms, and retail and OSD activation. A consolidated precinct End-of-Trip Facility (EOTF) supporting the OSD development and 50 Martin Place is located at basement level B2, accessed by two dedicated lifts and one dedicated stair. A small number of OSD back-of-house areas also occupy the below ground levels.

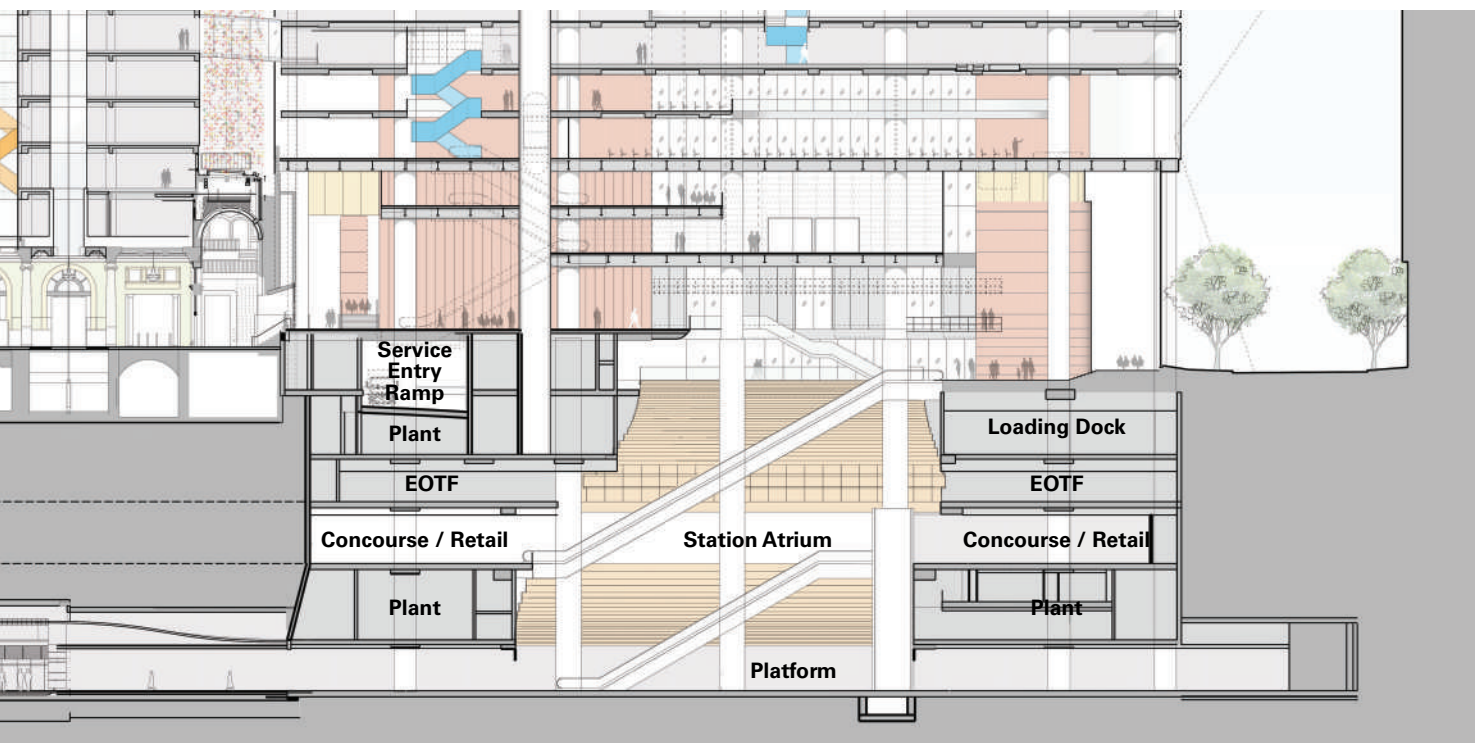
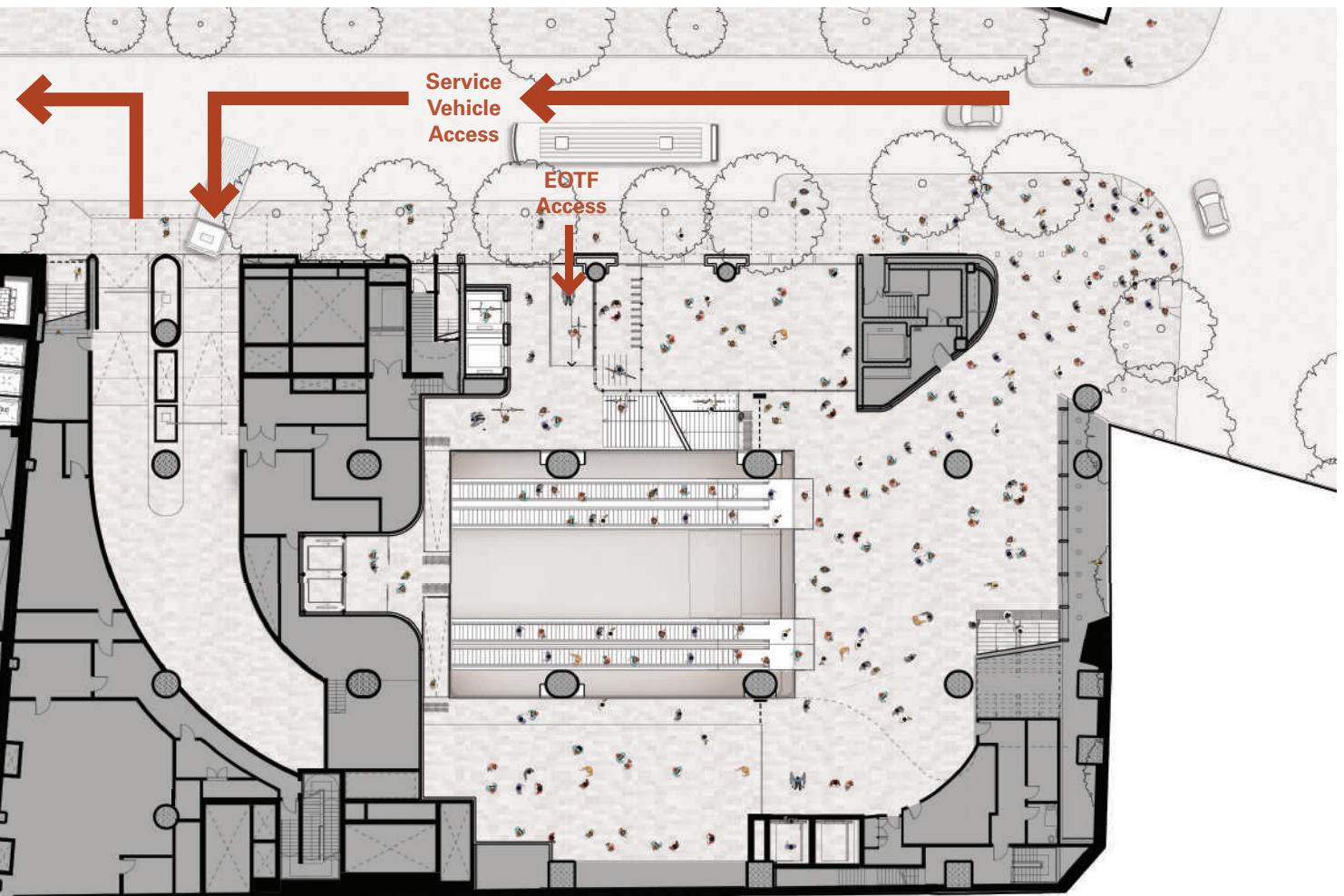
The main loading dock for the precinct is located on basement level B1 and is accessed from Castlereagh Street. It is provided as part of the development to manage the servicing, delivery and maintenance requirements of the precinct, offering a centralised facility for delivery/collections and waste management. The basement has a capacity for seven vehicles. B1 level also houses the OSD substation, communication rooms, tank rooms and various facility management rooms.



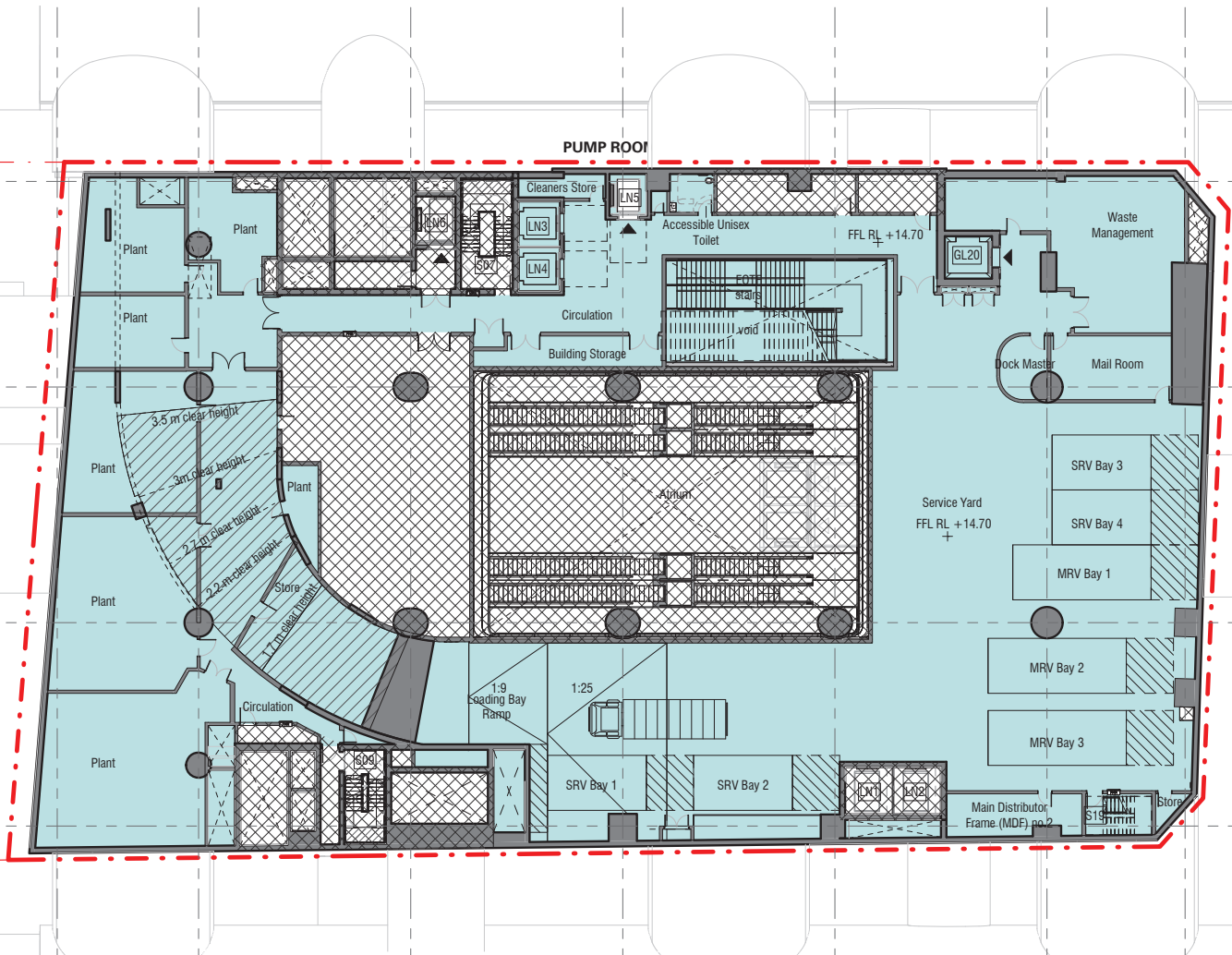
Basement Access, Lower Ground Plan



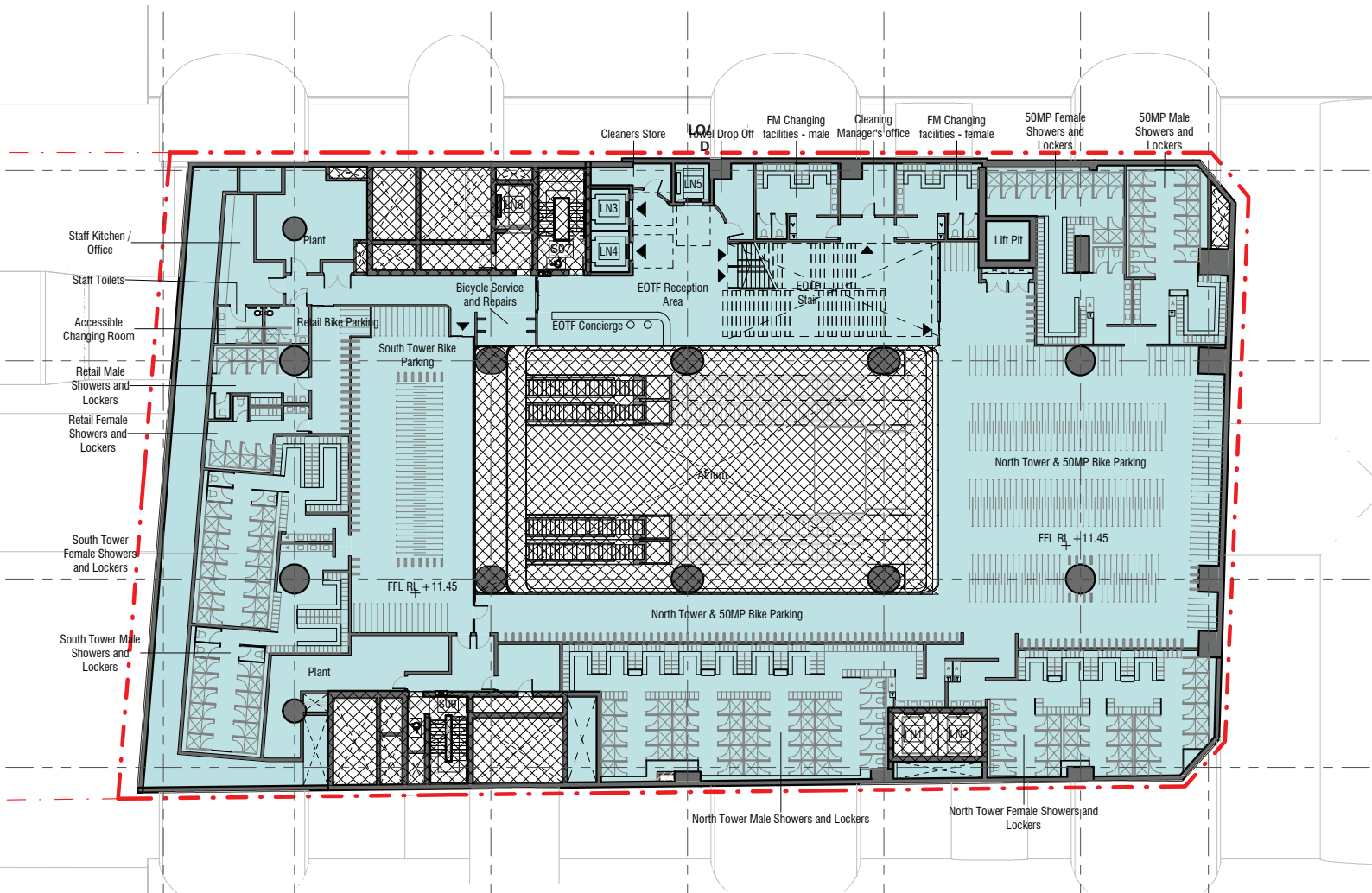
Basement Section / North Tower



Integrated Basement and Servicing

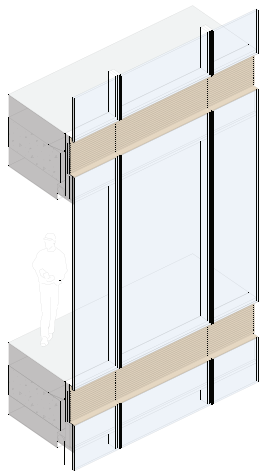


Basement 01 Plan, By Grimshaw

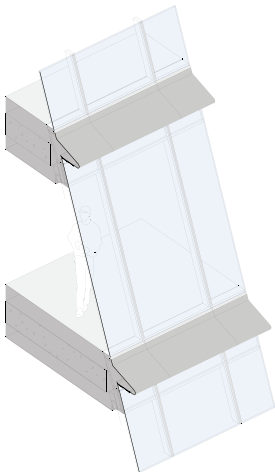
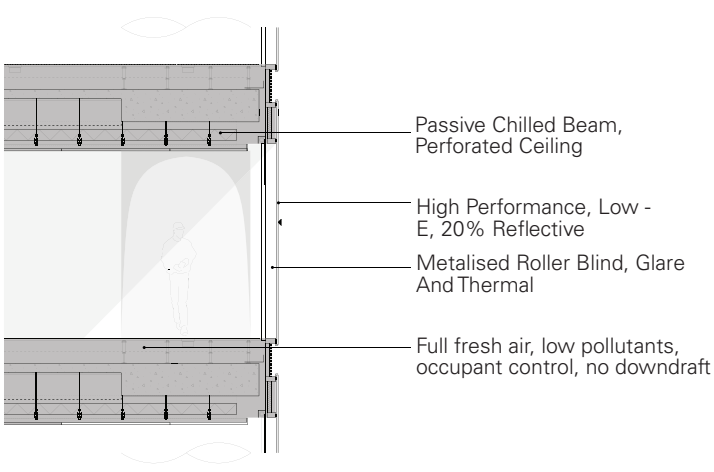


Basement 02 Plan, By Grimshaw

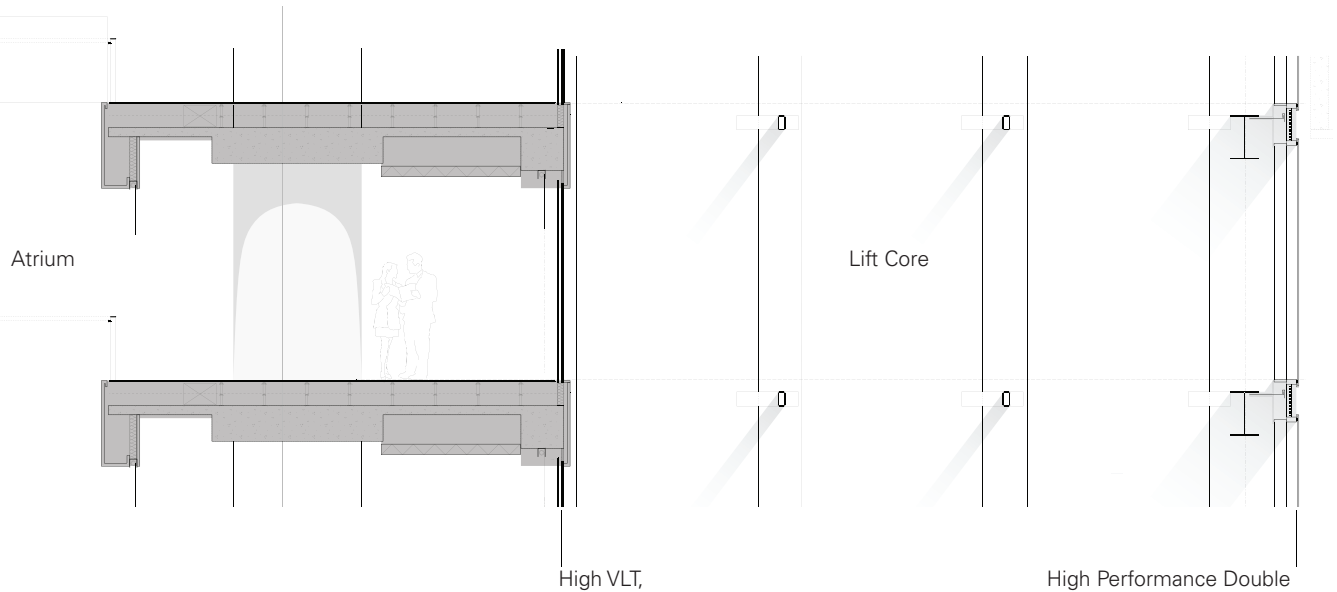
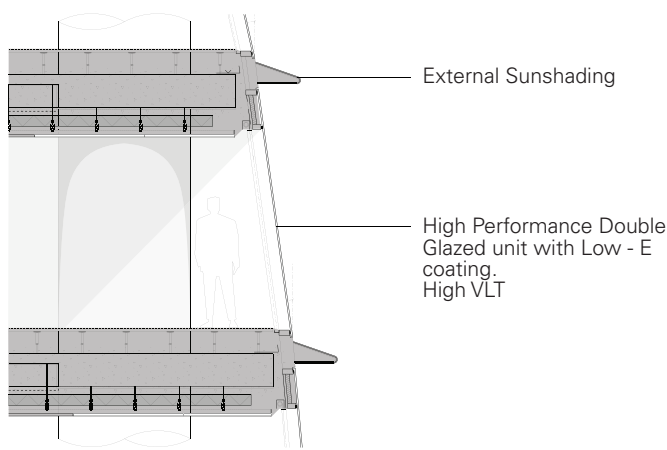
TOWER
FUNCTIONALITY



Typical Office Facade



Southern Lens Facade



Western Lift Core Facade

Typical Office Floor Plate

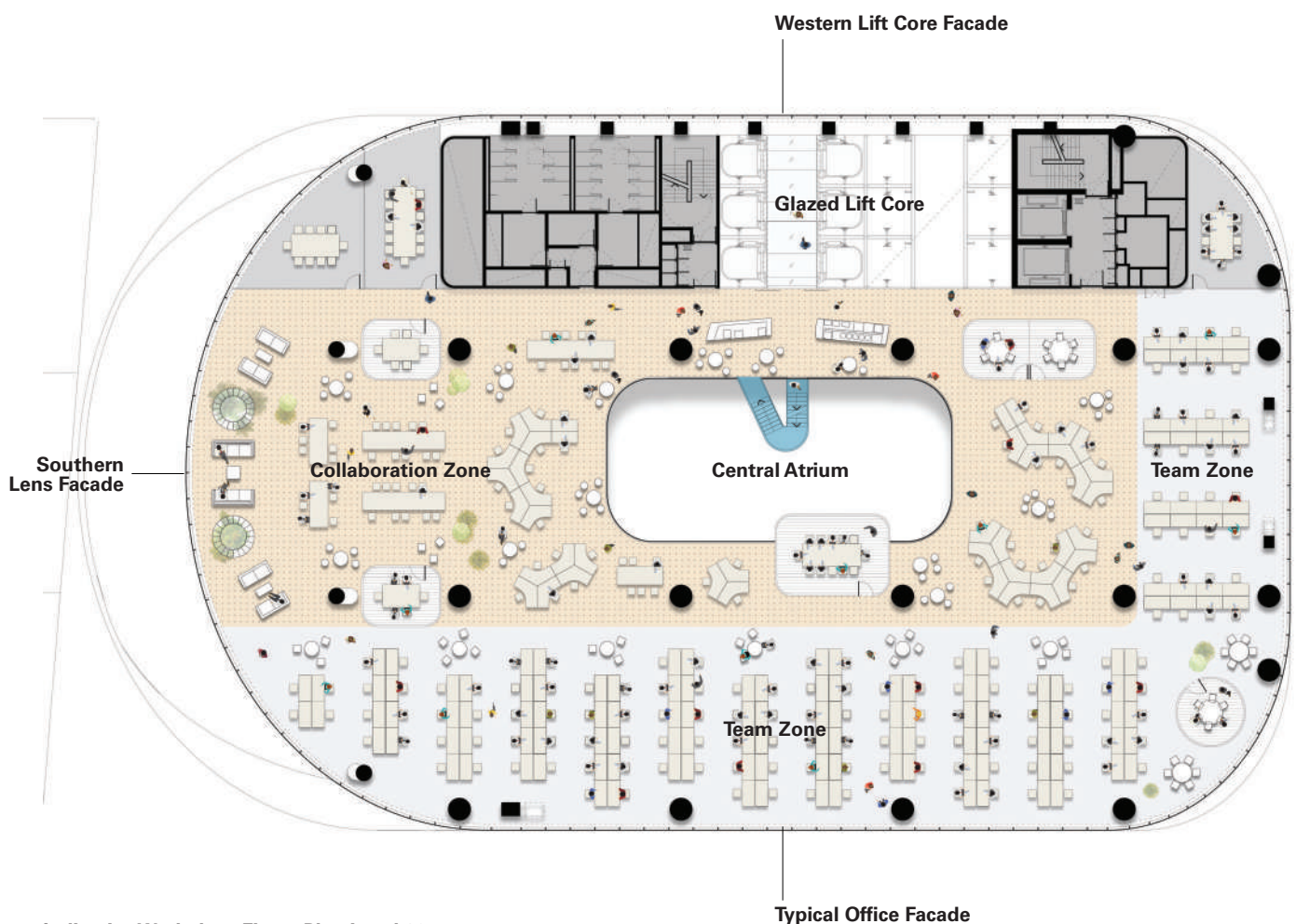
The tower provides a range of Office floor plate sizes vary within the tower between 2,200m² and 1,000m² with the average ~1,500m² (NLA).

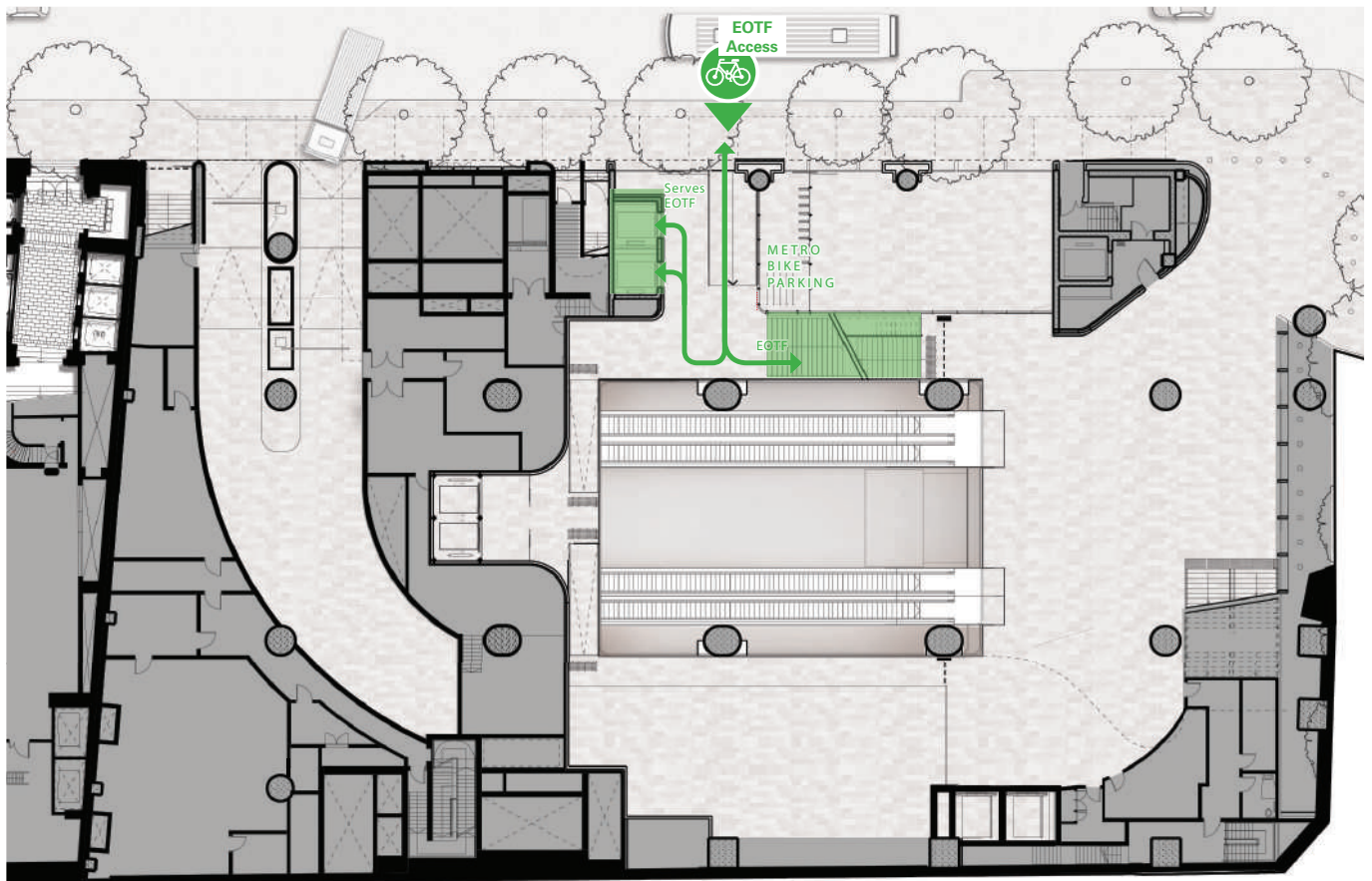
Views are maximised through extensive glazing with operable glare control. High levels of natural daylight and air quality are provided through out and all floors benefit from a side-lit core. In the low and mid-rise this provides natural light to central atria which provides visual and physical connections and promote circulation between floors.

The “Lens” at the south of the floorplate in high transparency glass promotes a relatively high level of diffuse daylight and gives occupants expansive views across 50 Martin Place and to the city.

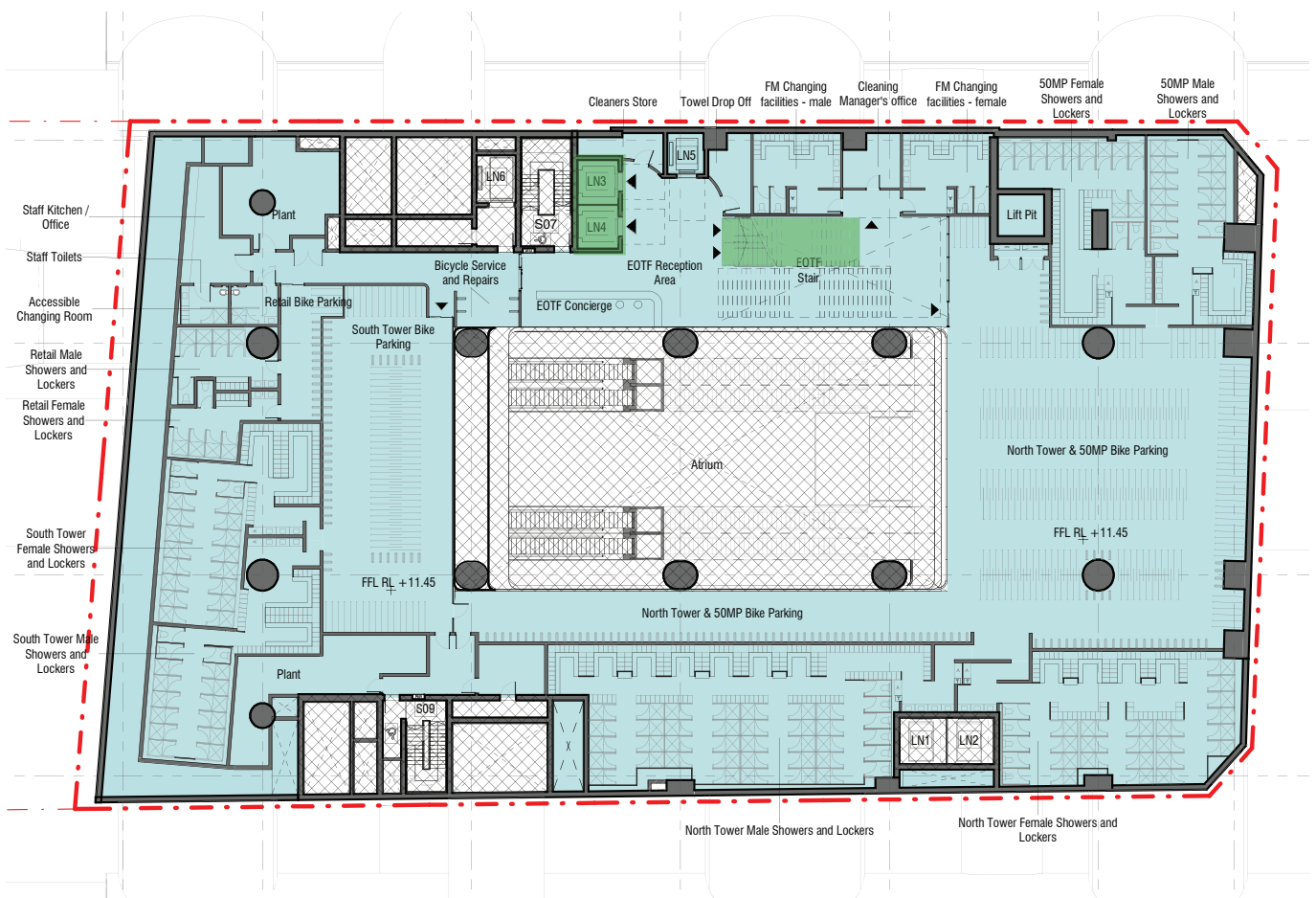
A series of three-storey terraced perimeter atria on the southern facade in the high-rise provides further connections between floors. Glare and solar heat gain are controlled with integrated horizontal sunshading projection to the facade.

Mobility is encouraged by creating a variety of workplace zones based on different levels of light and privacy.





End of Trip Facilities Access from Castlereagh Street - Lower Ground Plan



End of Trip Facilities - Level B2 Plan, by Grimshaw

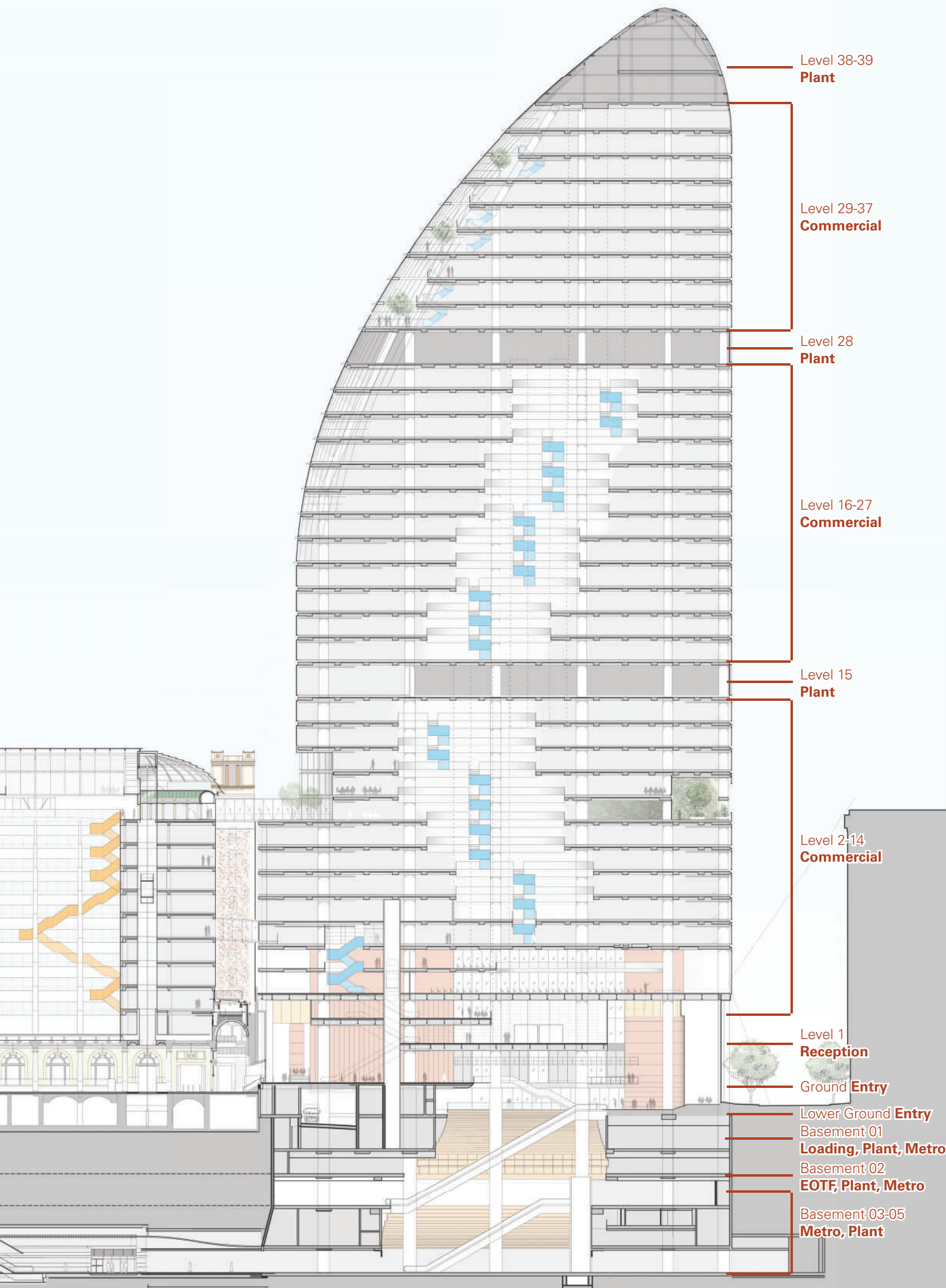
End of Trip Facilities

A precinct-wide End of Trip Facility (EOTF) supporting OSD developments (North and South Towers, 50 Martin Place and Retail Staff) is consolidated at basement level B2. The Castlereagh St frontage is activated by the lobby and retail area with clear signage for ease of way-finding. Glazing in the central atrium walls open into the EOTF on Level B2 activating the below-ground levels of the building.

Twenty Metro customer bike parking spaces are provided with direct access off Castlereagh Street as a requirement of the CSSI approval.

The OSD EOTF facilities are accessed via two dedicated lifts and a dedicated stair from the Castlereagh St level. The vertical connections are designed to accommodate the morning and afternoon peaks. The number of bike spaces, lockers and showers are derived from the GBCA 6 Star Green Star v 1.1 targets.

The layout provides separate secure areas for each end building user. The changing areas for retail tenants, 50 Martin Place, North Tower and South Tower will have access (access card or similar), with all changing facilities equipped with the appropriate number of toilets (male/female/accessibile).



Level 38-39
Plant

Level 29-37
Commercial

Level 28
Plant

Level 16-27
Commercial

Level 15
Plant

Level 2-14
Commercial

Level 1
Reception

Ground **Entry**

Lower Ground **Entry**

Basement 01

Loading, Plant, Metro

Basement 02

EOTF, Plant, Metro

Basement 03-05

Metro, Plant

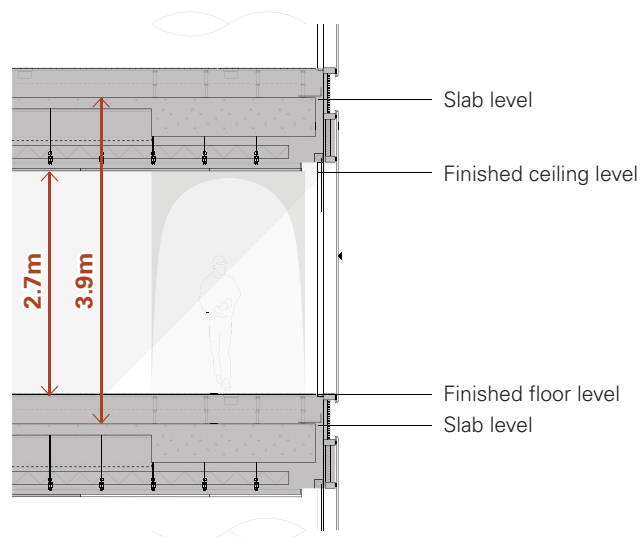
Use and Floor to Ceiling Heights

The development application proposes the following uses –

Levels 38-39	Plant
Levels 29-37	Commercial
Level 28	Plant
Level 16-27	Commercial
Level 15	Plant / Commercial
Level 2-14	Commercial
Level 1	Reception
LG-G	Public domain and Metro (Refer CSSI)
Basement B1	Loading, Plant (Refer CSSI)
Basement B2	EOTF, Plant (Refer CSSI)
Basement B3-B5	Plant and Metro (Refer CSSI)

Floor to Ceiling heights are proposed as follows -

Levels 29-37,	2.7m minimum
Levels 16-27,	2.7m minimum
Levels 2-14,	2.7m minimum
Level 1	2.7m minimum



Structure

A central and defining feature of the North Tower is the requirement for the structure to accommodate the iconic central atrium connecting the Metro entrances at Hunter Street to the platform levels, with the related vertical circulation paths.

The North Tower structure is designed as an in-situ reinforced building with reinforced concrete columns and reinforced concrete slab and post-tensioned beam system floor structures. Due to the architectural requirement of building geometry and the station requirements there is limited opportunity to utilise the concrete core wall arrangement down through the station levels due to the tapering nature of the of the building. For this reason the lateral stability of the tower in the north-south direction and east-west direction relies primarily on perimeter bracing in either reinforced concrete or in structural steelwork supplemented by the available concrete core structures achieved in the planning.

The North Tower structure is carefully arranged to avoid the critical Metro Station requirements including adits and caverns. The North Shaft forms the base of the North Tower and the Shaft and the Tower are designed to be constructed as one integrated structure from foundation to rooftop.

The station concourses, retail and plant spaces below ground and beneath the tower footprints are constructed as in-situ concrete basement structures with reinforced concrete columns, walls and slab and beam floors. The underground station basement structure will typically be bounded within the excavation by perimeter in-situ concrete walls.

Sustainability and Servicing

The ESD objectives for the North Tower are:

- + 5 star NABERS Energy minimum
- + 3.5 star NABERS Water Rating target
- + 6 Star Green Star Office Design & As-Built v1.1

Occupant well-being

Being surrounded by the pedestrianized Martin Place offers a unique opportunity to consider the redevelopment holistically and at a precinct level, with sustainability as a key driver for the development of the design.

The following drivers form part of the sustainability philosophy and aspirations for the North Tower of the Sydney Metro Martin Place Station Project:



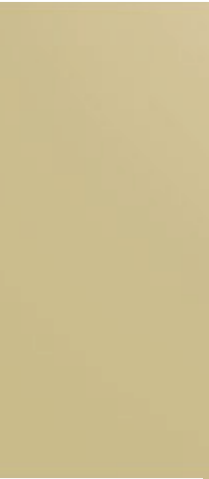
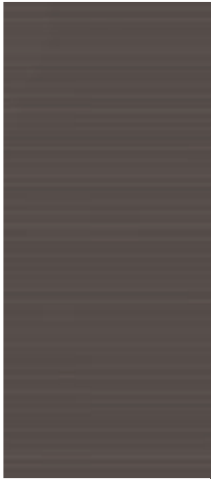

- + Worlds' Best Practice Benchmark using a Green Star Design & As Built v1.1 tool
- + Environmental Impact – a design capable of reducing carbon emissions, promoting energy efficiency and reducing resource consumption
- + Sustainable definition – a design capable of achieving recognised high performance with efficient use of resources
- + Integration of the station with the surrounding precinct
- + Implementation of highly efficient systems -The use of energy efficient HVAC and lighting systems combined with the passive strategies in the building will further contribute to energy, water and carbon reduction

The building services for the North Tower are designed to meet the following brief:

- + Building and services are designed in accordance with Property Council of Australia's (PCA) to achieve Premium grade.
- + World class workplace for premium tenants;

The building services will be robust, tested solutions that achieve the internal environment necessary to ensure user thermal comfort, whilst minimizing operational energy consumption, noise, visual impact, capital cost and space requirements. The services will be designed to meet current expectations for a commercial building development, as defined by the Building Code of Australia.

Finishes Schedule

					
Curtain Wall Glazing Typical Office Facade DGU High performance Low E coating with neutral colour cast 40% min. VLT 20% Reflectivity	Curtain Wall Glazing Southern Lens and Western Lift Core DGU High performance Low E coating with neutral colour cast 60% min. VLT High Transparency	Curtain Wall Details Horizontal Bands, Podium Fins and Horizontal Louvres Warm light bronze metallic coloured anodised aluminium panel	Podium Details Vertical Slatted Decorative Screen Dark bronze metallic coloured powdercoat steel Colour to match public domain steelwork	Podium Details Public Domain Steelwork Dark bronze metallic coloured powdercoat steel	Podium Base Wall Cladding Granite to match 50 Martin Place masonry base



Interior Wall Cladding	Interior Wall Cladding	Interior Wall Cladding	Interior Ground Lobby Ceiling	Interior and Exterior Columns	Interior and Exterior Public Domain Floor
Dark bronze metallic coloured anodised aluminium panel	Bronze metallic coloured anodised aluminium panel	Zinc metallic coloured anodised aluminium panel	Warm light bronze metallic coloured anodised aluminium panel Colour to match curtain wall details	White painted steel finish	Austral Verde and Austral Black Granite to match City of Sydney Paving

Context

North Site Location

As a full city block, consolidating seven smaller sites this project has the potential to reinvigorate this part of the city, act as a catalyst for further improvements and reinforce the importance of including pedestrian connections to significant public spaces.

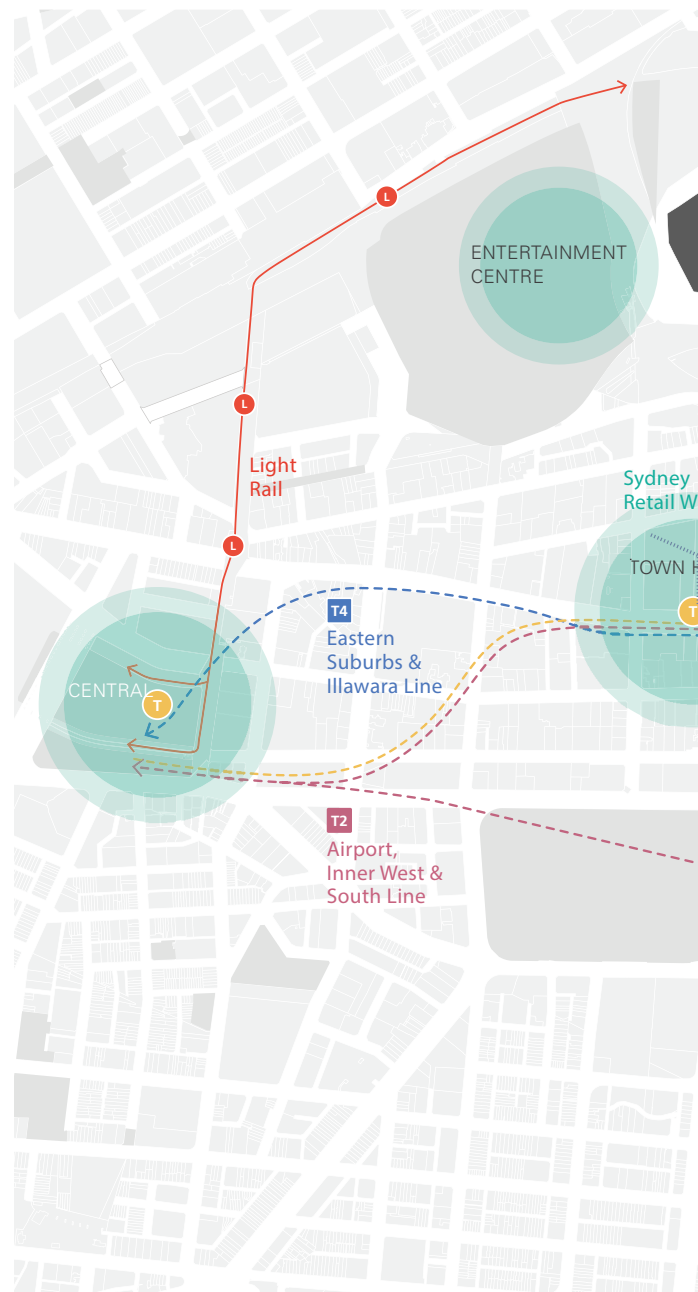
The North Site is located within the commercial district of the Sydney CBD immediately to the north of the historically and culturally significant Martin Place, which holds importance as one of the few centrally located urban spaces that holds large scale events. It also provides a key pedestrian east-west link across the prevailing north-south street grid.

It is bounded by Elizabeth Street to the east, Castlereagh Street to the west, Hunter Street to the north and 50 Martin Place to the south. The North Site is at a junction of two distinct building alignments following the bend in Hunter Street at its junction with Castlereagh Street and is adjacent to important public open spaces Chifley Square and Richard Johnson Squares at the northern corners.

The North Site is located within the Martin Place Metro Station Precinct. The project provides a one-off opportunity to create a city defining outcome by designing the North Site as an integrated precinct that includes the land located at 9 - 19 Elizabeth Street and the historically significant 50 Martin Place (both owned by Macquarie).

Within a broader context, the justice, government and cultural precincts are located to the east, adjacent to Macquarie Street and the retail precinct of Pitt and Castlereagh Streets is to the south. To the west is George Street, one of Sydney's most important streets, with its significance being further enhanced by the introduction of the light rail and re-purposing of the street for pedestrians. Many of Sydney's most remarkable public and commercial buildings are located on this street which will also soon be pedestrianised between Hunter Street and Bathurst Street.

In terms of public transport, the North Site is connected to bus routes along Elizabeth Street and Castlereagh Street, the T4 Eastern Suburbs and Illawara line at Martin Place train station and the T2 Airport, Inner West and South line at the nearby St James train station. From 2019 it will be a short walk to the new CBD South East Light Rail line running along George Street.



Project Site Within Existing Urban Context

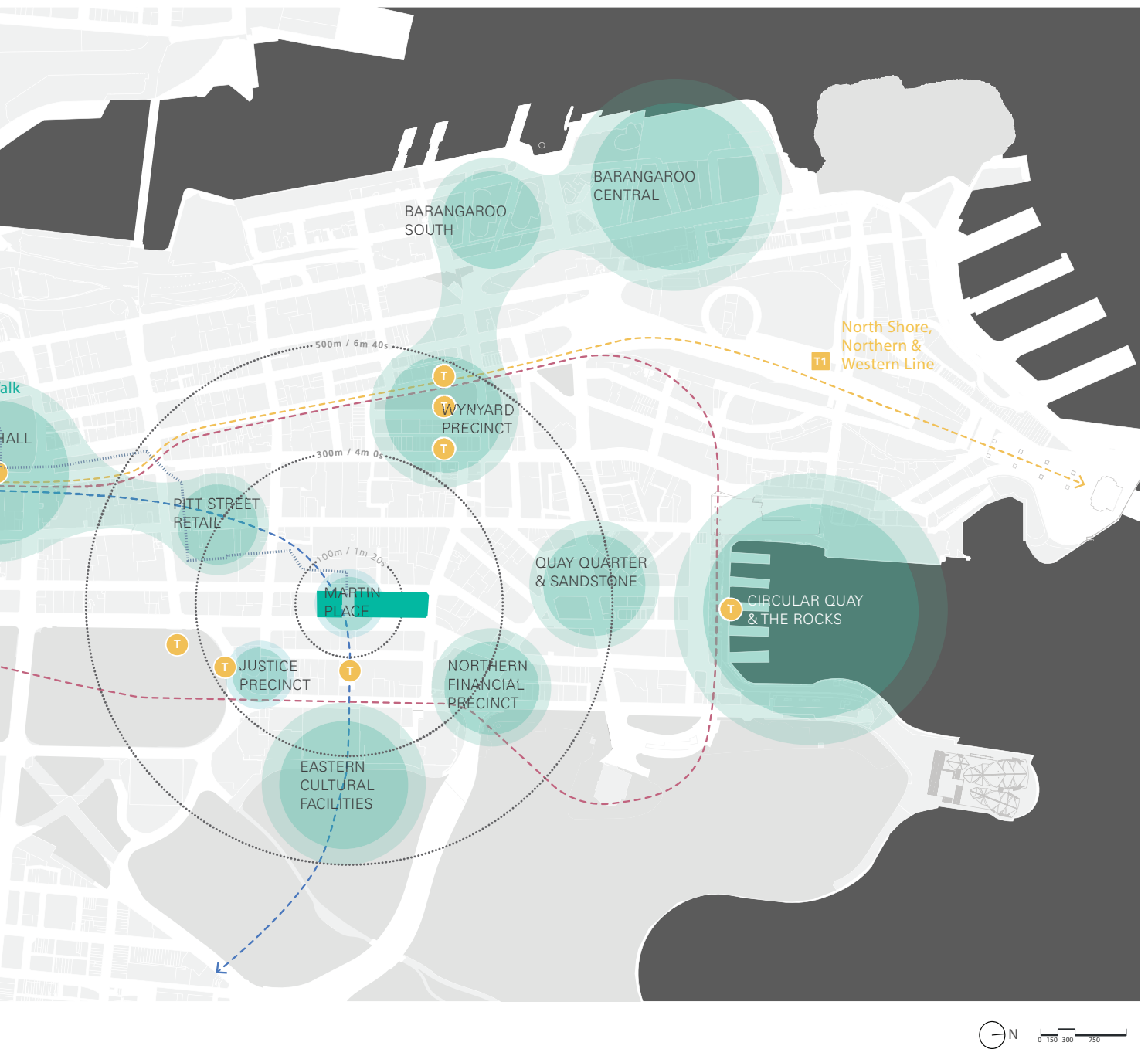


Image sourced from: "SSDA Design Report. Sydney Metro Martin Place Station" Report by Grimshaw

Context

Topography

The level difference between Elizabeth Street and Castlereagh Street allows a clear distinction and grade separation between the OSD and Metro uses within a single volume of overlapping and linked levels.

The site topography slopes in an east-west direction, and drops towards the north-west of the Precinct. The east-west level change between Castlereagh Street and Elizabeth Street is nearly 4m, across the breadth of the ~45m wide site. This results in a significant constraint due to the gradient exceeding the maximum mandated gradient for equitable DDA access.

Both Elizabeth Street and Castlereagh Street descend gradually towards the north with a level change from 50 Martin Place of approximately 0.5m along Castlereagh Street and nearly 1.5m along Elizabeth Street.

The North Site is surrounded by clusters of towers to the east, west and north and lower scale buildings to the south. Several towers are located immediately to the east on Hunter Street, including 8 Chifley, Chifley Square and 126 Phillip Street. Buildings on Castlereagh Street vary in height and size, dominated by 9 Castlereagh Street and the MLC Centre. Elizabeth Street has a similar variety of buildings punctuated by the 52 Martin Place tower. Significant towers are also located further to the north including Governor Phillip Tower, Governor Macquarie Tower and Aurora Place. Directly to the south, is the heritage significant 50 Martin Place fronting onto the northern side of Martin Place.



TOWERS

TOWERS

RIDGE

GULLY

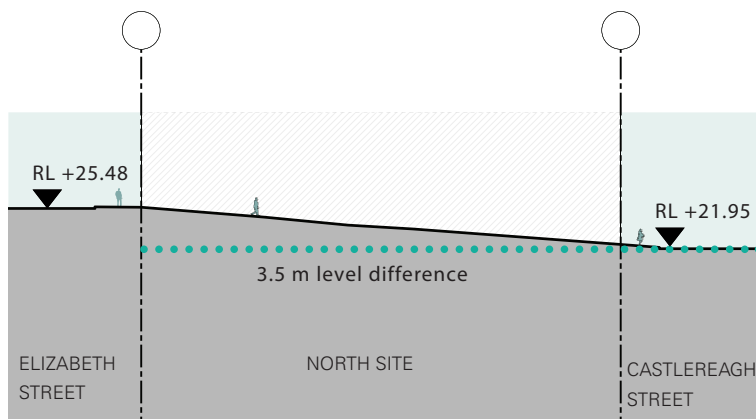
TOWERS

RIDGE

SITE

Context

Topography

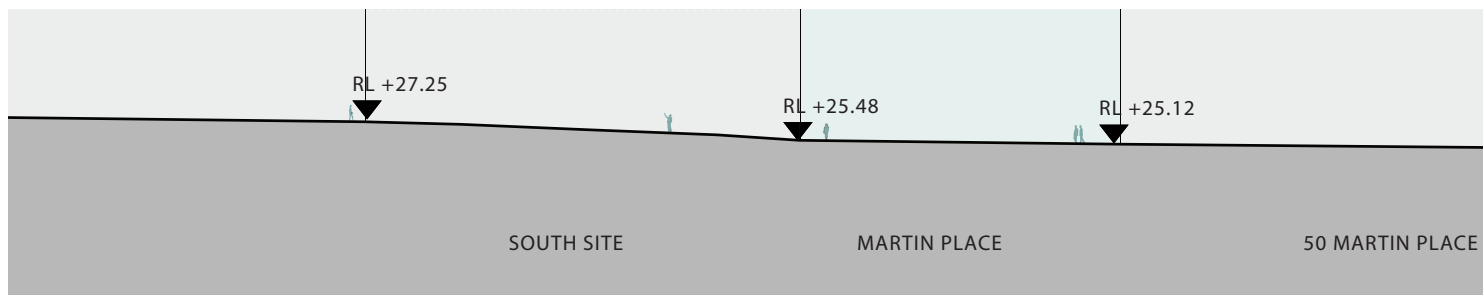


A-A Hunter Street Elevation

3.5 m level difference

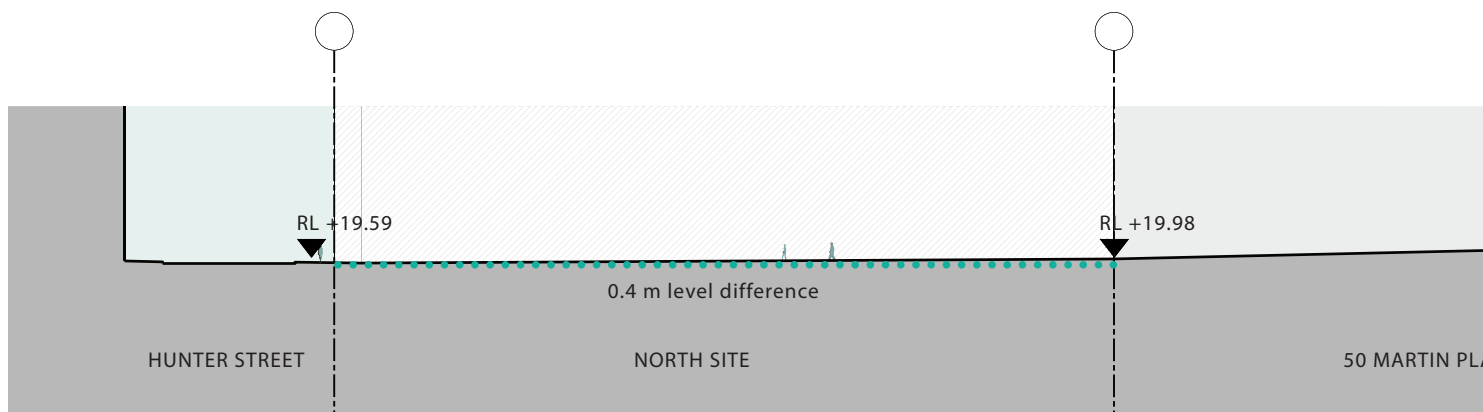
North Site Summary:

- + 0.4 m level difference along Castlereagh Street to 50 Martin Place.
- + 1.3 m level difference along Elizabeth Street to 50 Martin Place.
- + 3.5 m level difference along Hunter Street.



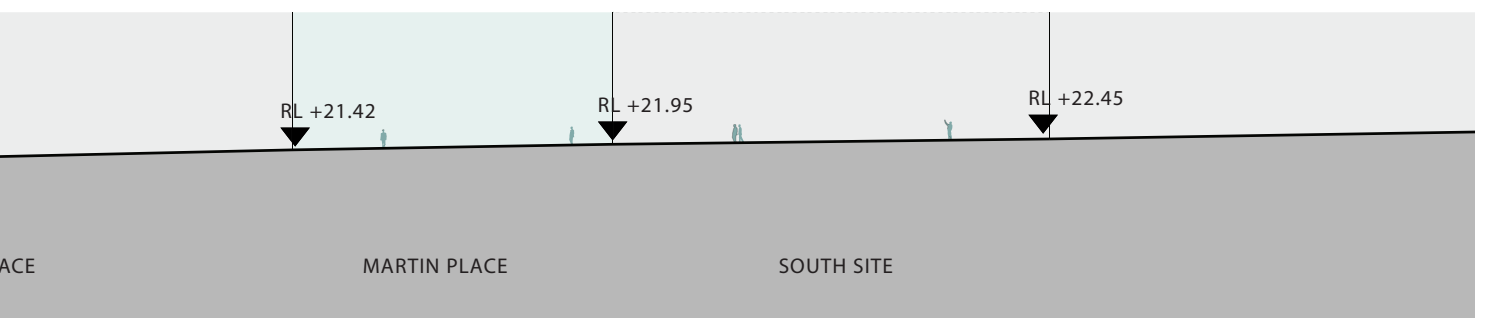
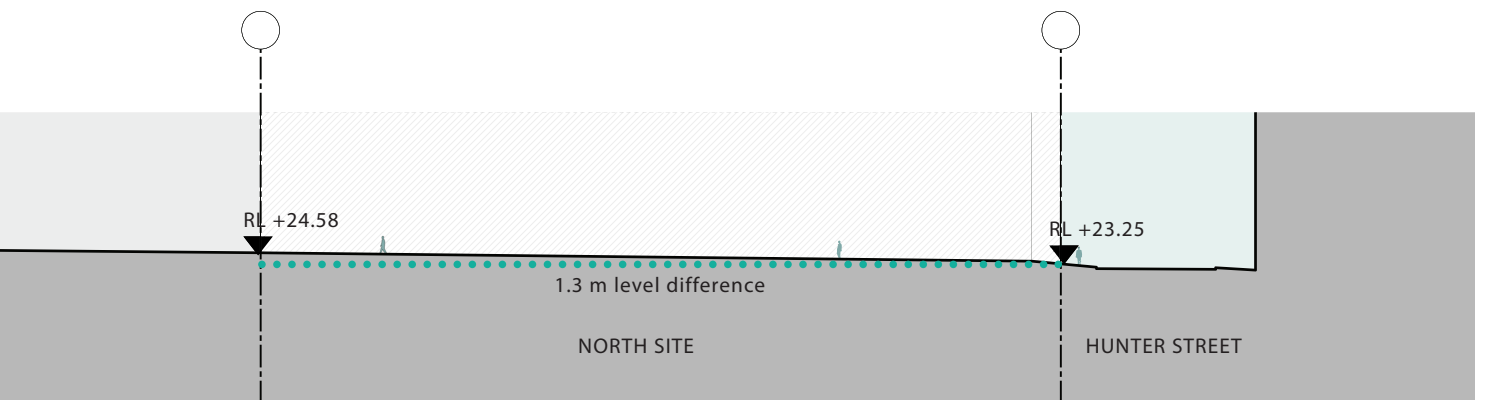
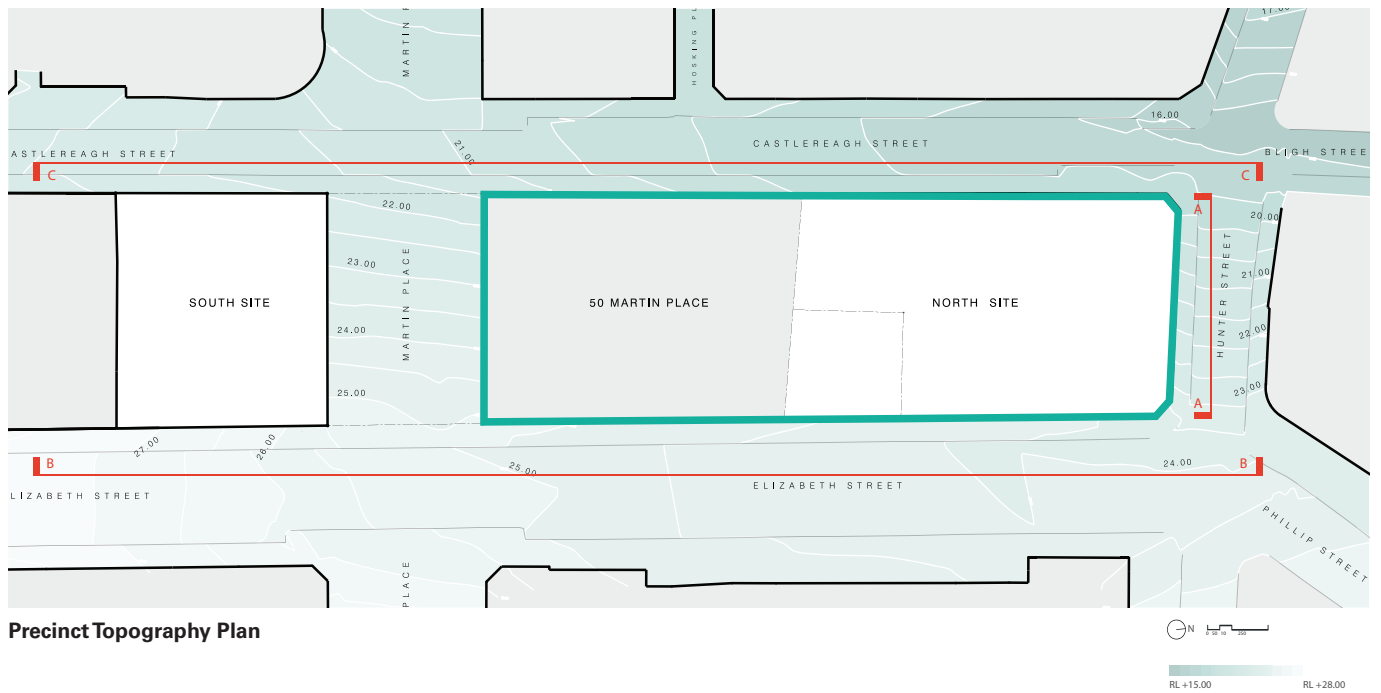
B-B Elizabeth Street Elevation

3.7 m level difference



C-C Castlereagh Street Elevation

2.8 m level difference



Images sourced from: "SSDA Design Report. Sydney Metro Martin Place Station" Report by Grimshaw

Context

Site Survey and Boundary

The project represents a unique opportunity to consolidate an entire city block.

Located close to the centre of the Sydney CBD, the North Site comprises of the entire city block bounded by Hunter Street, Elizabeth Street, Castlereagh Street and Martin Place. It includes the existing 50 Martin Place Building.

Collectively the North Site constitutes an above ground site area of 6,022 sqm and it combines several existing lots which relate to the following properties:

- + 50 Martin Place*;
- + 9-19 Elizabeth Street*;
- + 8-12 Castlereagh Street;
- + 7 Elizabeth Street; and
- + 55 Hunter Street

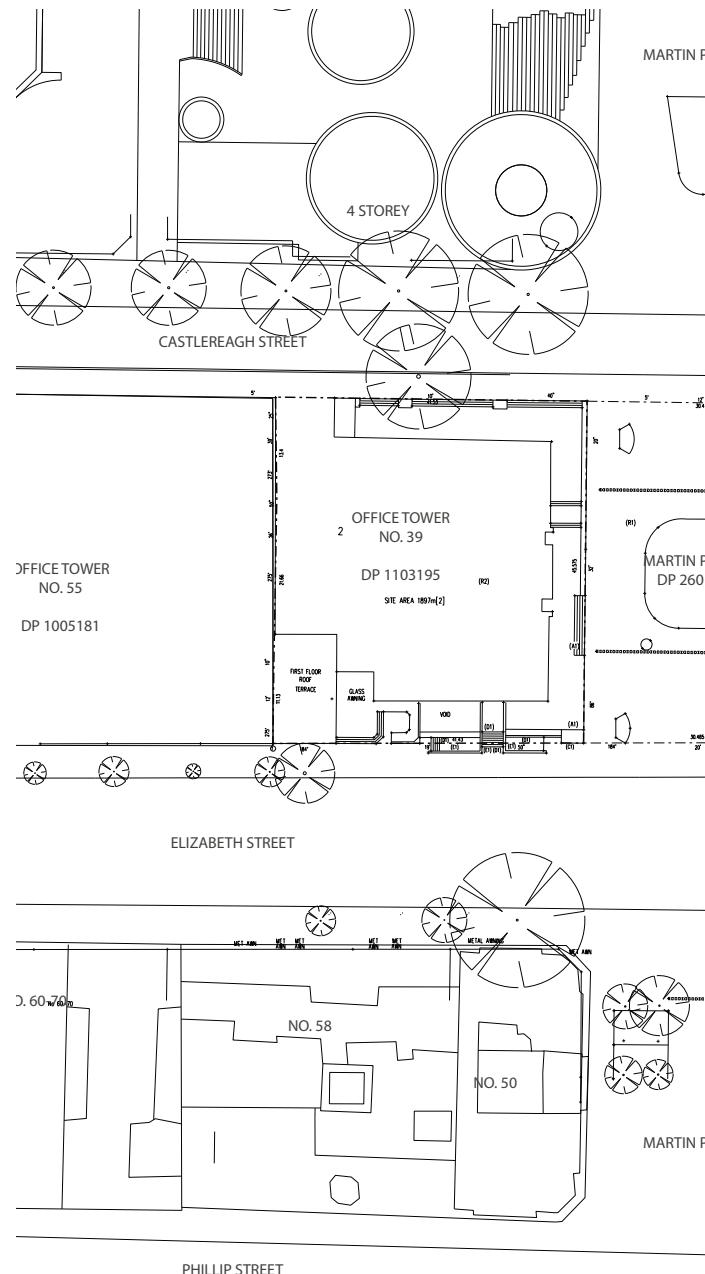
*owned by Macquarie

Demolition of all existing buildings on the North Site other than 50 Martin Place have already been approved as part of the CSSI approval processes for the Sydney Metro. 50 Martin Place is not proposed to be demolished.

Buildings approved for demolition:

- + 55 Hunter Street (CSSI Approval);
- + 5 Elizabeth Street (CSSI Approval);
- + 7 Elizabeth Street (CSSI Approval);
- + 8-12 Castlereagh Street (CSSI Approval); and
- + 9-19 Elizabeth Street (Macquarie Proposal, Mod 3 of the CSSI Approval).

Demolition works are currently underway for all of the above properties, with the exception of 9-19 Elizabeth Street.



Existing Building Plan



-  NORTH SITE AREA
-  BUILDINGS TO BE DEMOLISHED



Image sourced from: "SSDA Design Report. Sydney Metro Martin Place Station" Report by Grimshaw

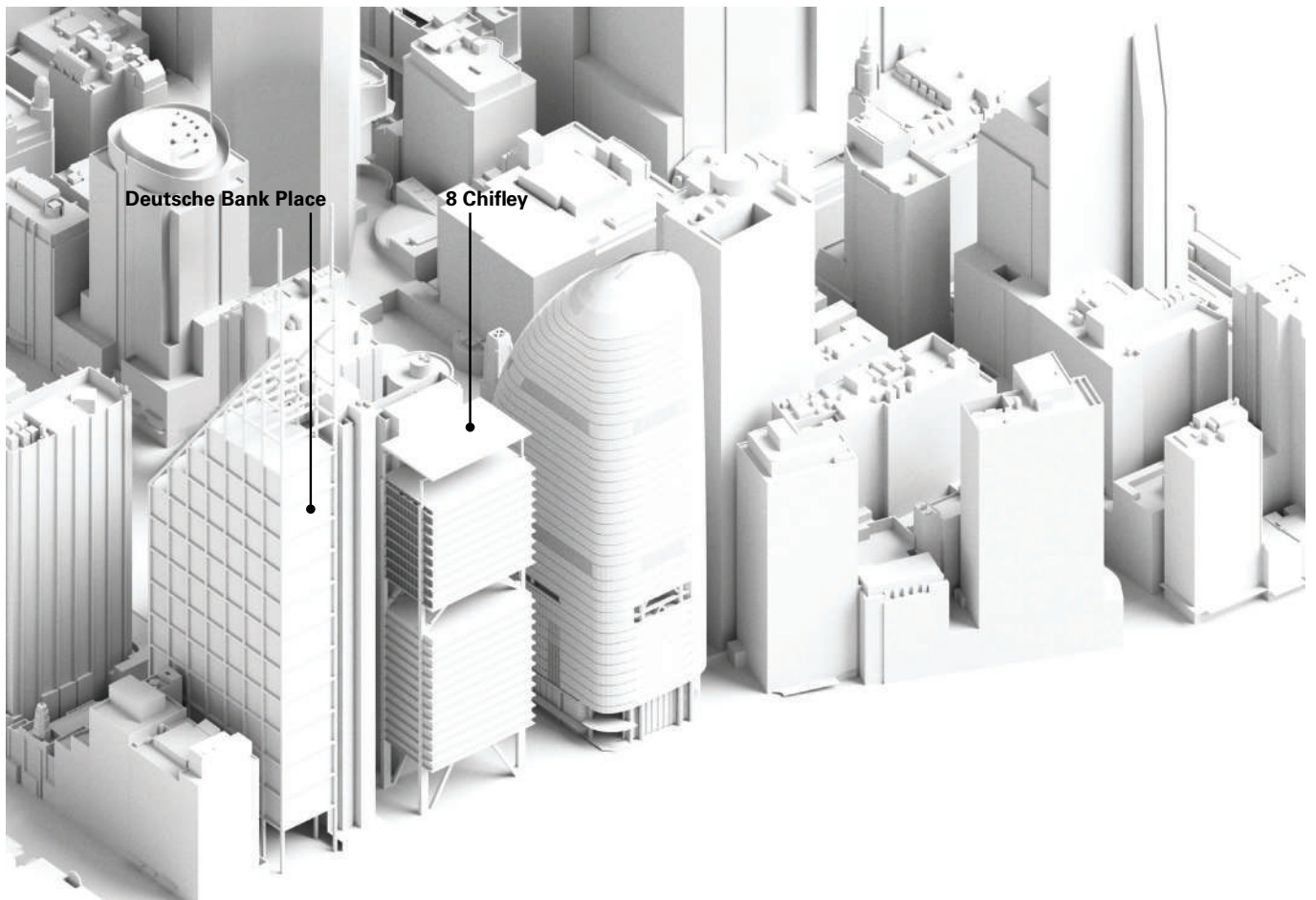
Context

Street Wall

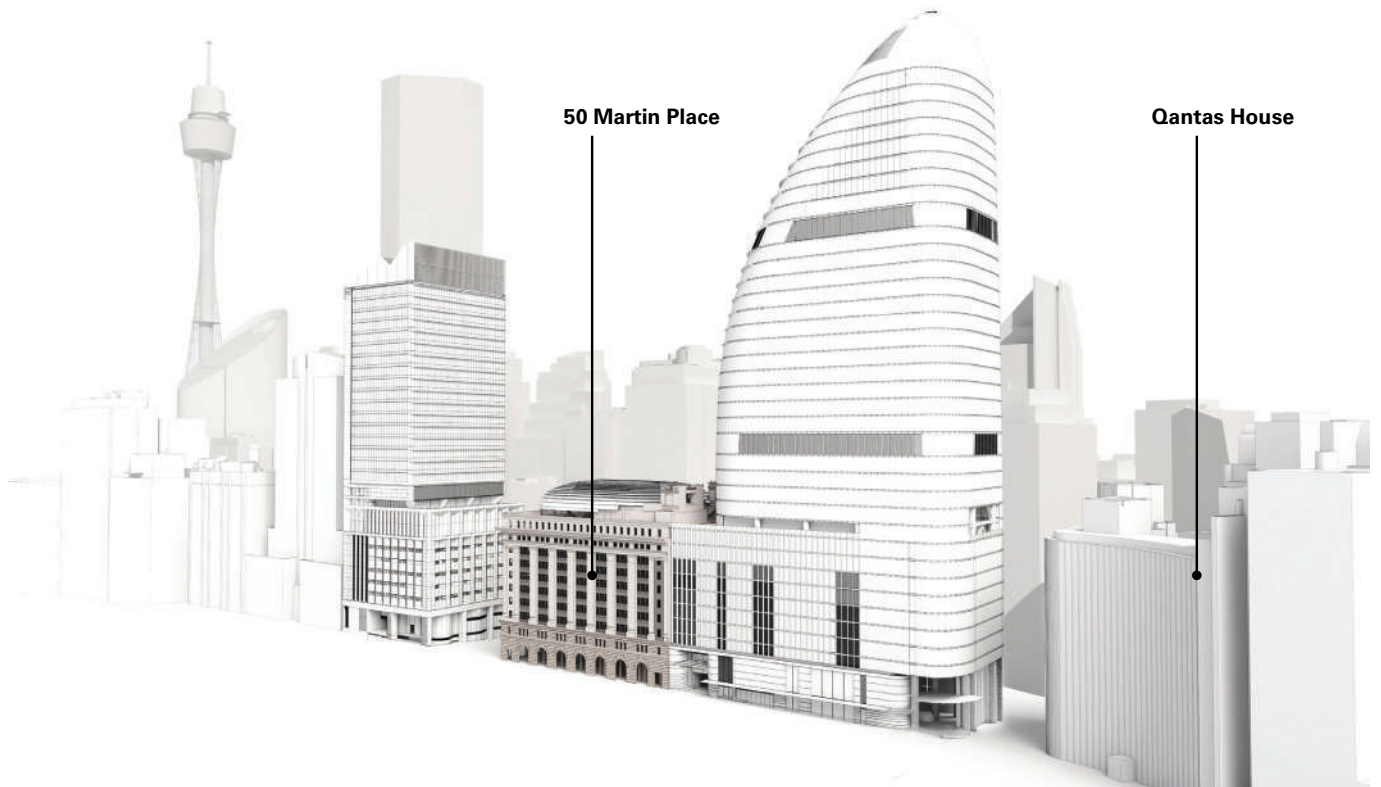
While it is useful to acknowledge the parapet heights of both the Qantas House in Chifley Square and the historic 50 Martin Place building, the proposed North Tower facades on Castlereagh Street and Elizabeth Street need to marry happily with the tower-to-ground form that is agreed to be appropriate on Hunter Street.

Elizabeth Street and Castlereagh Street are dominated by 50 Martin Place which establishes a dominant street wall at approx. 45m high. This street wall datum extends to Qantas House, Chifley Square and the City Mutual Building to the north. There is otherwise considerable variety of street wall heights along Elizabeth Street and Castlereagh Street and the streetscapes do not have established setbacks.

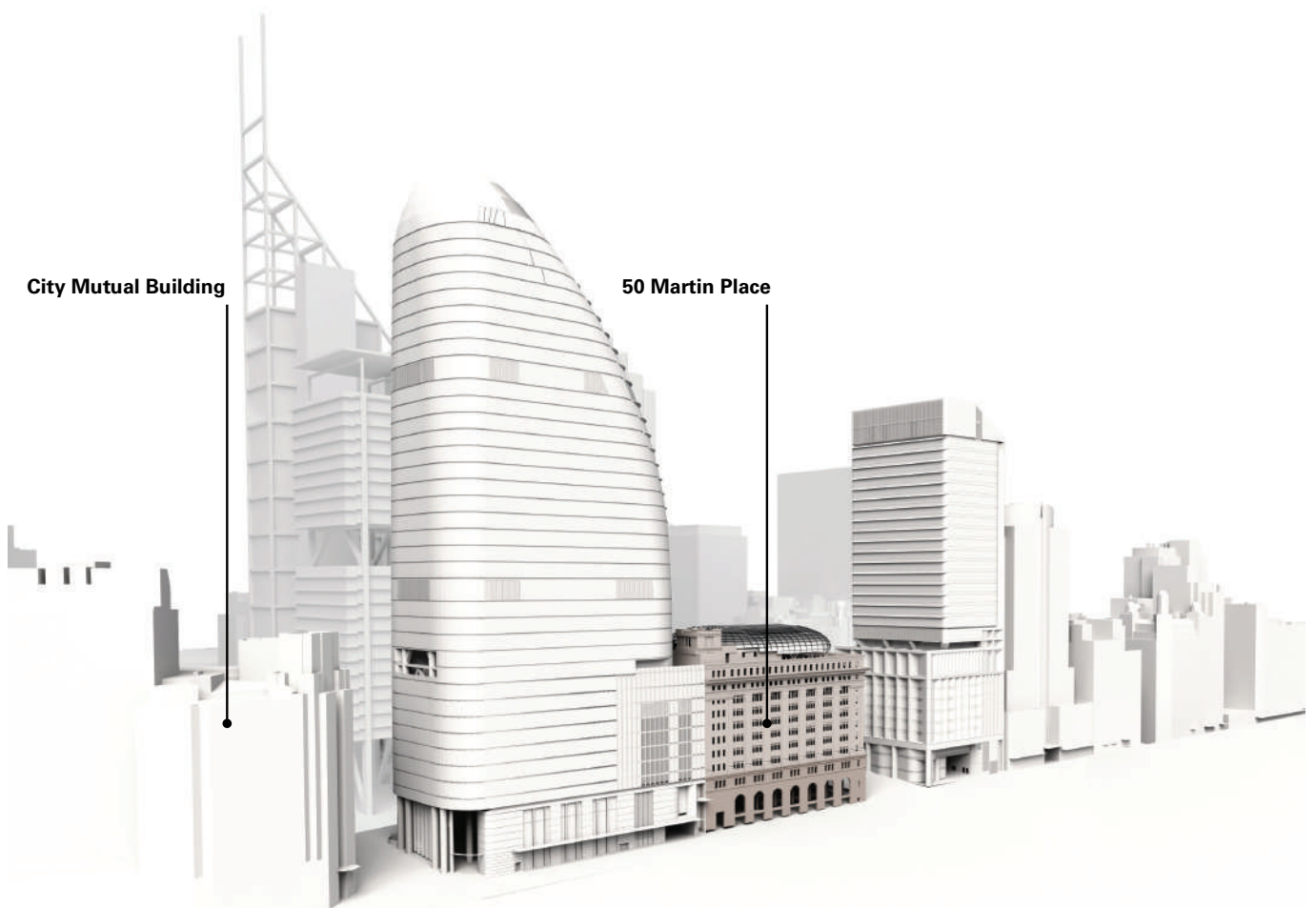
The built form of Hunter Street features a number of tall buildings with varied setbacks. The southern edge of Chifley Square is characterised by tall towers with zero setbacks to Hunter Street. The towers that establish this character are 8 Chifley and Deutsche Bank Place. Both have “reverse podiums” being recessed as they meet the ground, with the level of these reverse podiums being relatively consistent for both buildings.



Hunter Street elevation



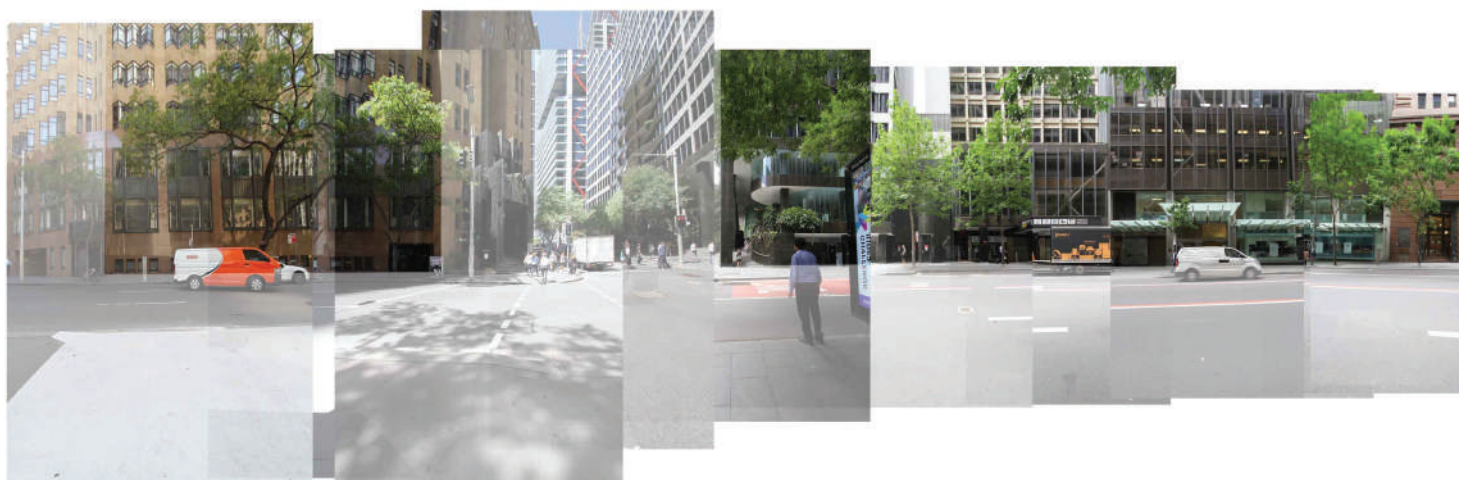
Elizabeth Street elevation



Castlereagh Street elevation

Context

Street Elevations





Castlereagh Street (east) existing elevation



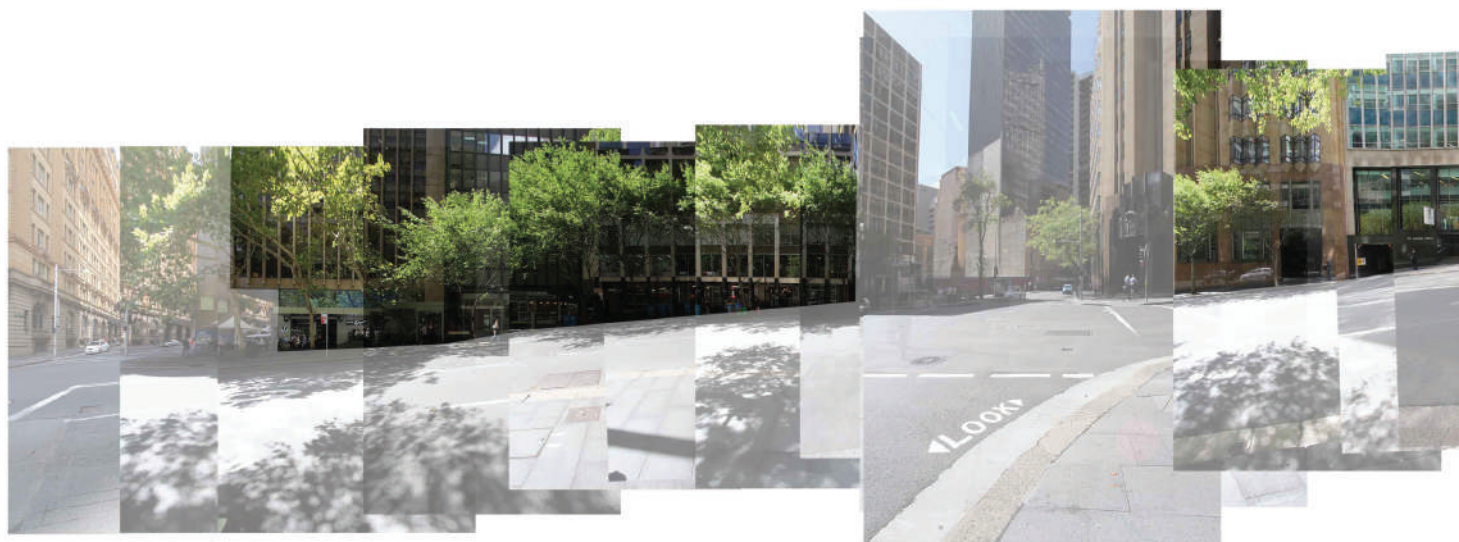
Elizabeth Street (west) existing elevation

Images sourced from: "The Urban Design of Sydney Metro Martin Place Station Precinct" Report by Tzannes

Sydney Metro Martin Place, North Tower Johnson Pilton Walker

Context

Street Elevations





Hunter Street (north) existing elevation



Hunter Street (south) existing elevation

Images sourced from: "The Urban Design of Sydney Metro Martin Place Station Precinct" Report by Tzannes

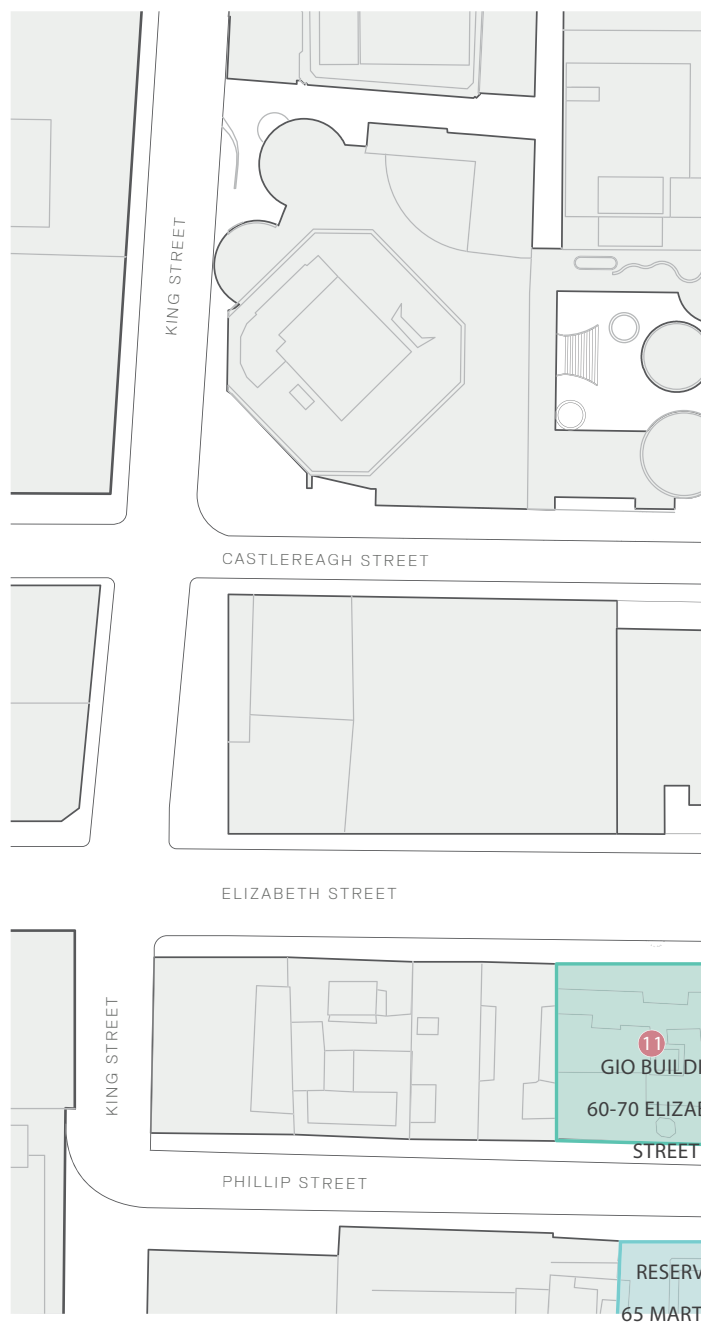
Sydney Metro Martin Place, North Tower Johnson Pilton Walker

Context

Heritage

A key component of the urban qualities of the context is derived from its outstanding heritage character. The proposed North Tower will respect the curtilages of the heritage-listed items and public spaces, including Martin Place, Chifley Square and Richard Johnson Square.

The Precinct has substantial heritage significance, which includes 50 Martin Place and Martin Place along the southern end of the North Site and the various heritage buildings that line its edges. Surrounding the northern end of the North Site are another cluster of heritage buildings and other spaces including Chifley Square and Richard Johnson Square, Qantas House, City Mutual Building and MLC Building (38-46 Martin Place).



Heritage Buildings Analysis

- STATE HERITAGE LISTING
- LEP HERITAGE LISTING
- COMMONWEALTH HERITAGE LISTING

↑
CENOTAPH

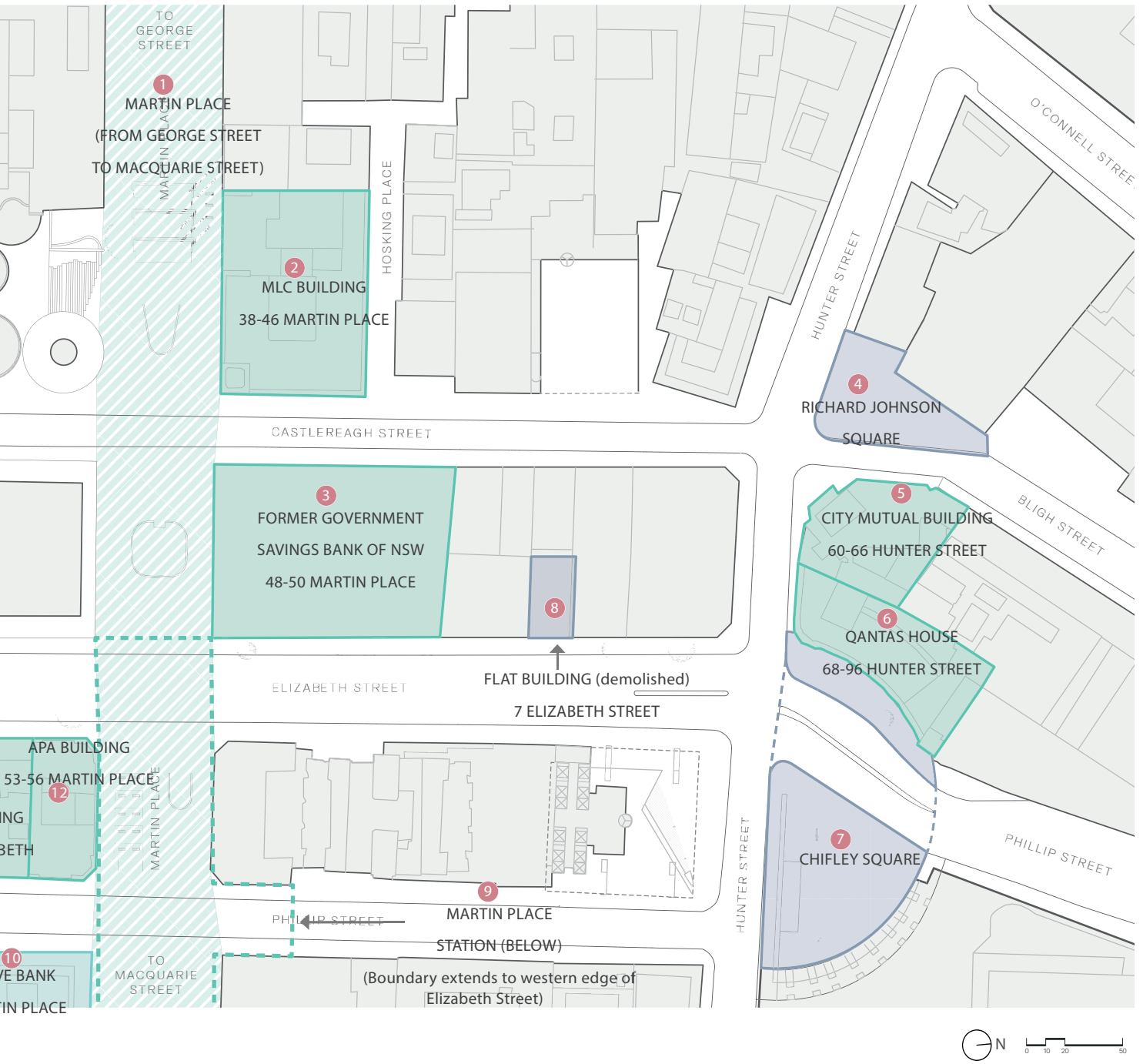


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