

173-179 Walker Street, North Sydney

URBAN DESIGN STRATEGY

PREPARED FOR

Avenor.



19 OCTOBER 2017
PLANNING PROPOSAL

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1.0 Introduction

1.1 Purpose

This Urban Design Strategy has been prepared by *ae design partnership* on behalf of *Avenor* to form part of a planning proposal for the site at 173-179 Walker Street North Sydney (the site).

The proposal delivers Council's vision for the site, aligning the future delivery of the Ward Street Master Plan and the wider North Sydney precinct.

1.2 Vision

The vision for the site is to provide a thin, elegant tower delivering an improved urban design and public domain outcome for the residents and workers of the North Sydney Strategic Centre.

1.3 Opportunities

- Improve the public domain and support an 18 hour economy.
- Activate economic activity within the North Sydney Centre by supporting job growth with residential uses
- Support housing targets prescribed in the North District Plan (GSC 2016)
- Site location on the edge of the B3 core, presents rare residential opportunity to support future housing supply in proximity to the Northern Sydney Centre, where a limited number of sites are able to provide residential uses.
- Support urban amalgamation and urban renewal opportunities along the Sydney Metro line as outlined in the Draft District Plan 2016.

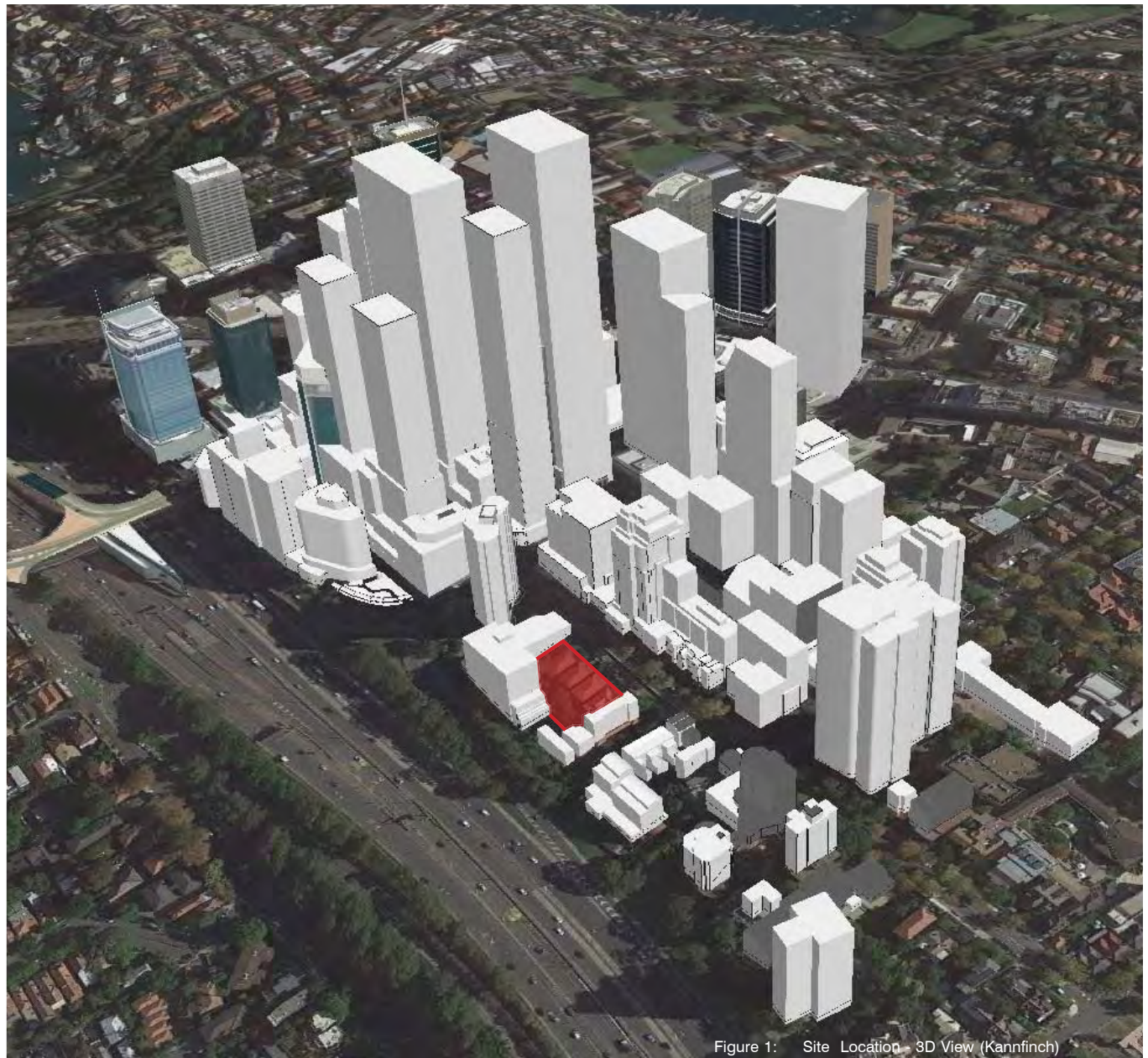


Figure 1: Site Location - 3D View (Kannfinch)

2.0 The Site

The site is legally described as SP11082, SP86752, SP9808 and SP64615, otherwise known as 173 – 179 Walker Street, North Sydney.

173 Walker Street – 6 strata units

175 Walker Street – 6 strata units

177 Walker Street – 6 strata units

179 Walker Street – 6 strata units

Site Area: 2,339 sqm
Site Frontage: 57.8 m frontage to Walker Street
Site Depth: 40.2 m
Description: 4 x three storey inter-war apartment buildings in poor conditions
Accessibility: Within 200 m of the planned Victoria Cross Station
Zoning: R4 High Density Residential
Maximum Height: 12 m
Heritage Listing: None

LEGEND



Subject Site



Figure 2: Site Location - Aerial

2.1 Site Location & Context

There is an opportunity for renewal of the site in response to its high level of accessibility to:

- Public Transport:
 - Within 200 metres (under 3 minute walk) from the future Victoria Cross Metro Station.
 - 3 minute commute by Metro from Victoria Cross to Barangaroo.
 - Within 600m (under 8 minute walk) from the existing North Sydney Train station.



Figure 3: Site Location & Context

2.2 Site Location & Proximity

The site is located immediately east of the Ward Street Master Plan Precinct.

- Approximately 50m north east of the North Sydney Central Business District, which is identified as part of Sydney's Global City which aims at establishing long-term sustainable connections with Asia through:
 - International corporations;
 - Business leaders,
 - Tourists; and
 - Students.



LEGEND

- Subject Site
- Pedestrian Connections



3.0 Strategic Justification

Aligning with strategic planning for the North Sydney Local Government Area on a regional, sub-regional and local level, redevelopment of the study area will act as a catalyst for growth within North Sydney CBD, in response to three key strategic drivers for change:

Draft North District Plan (Greater Sydney Commission, 2016)

A Productive City

- Planning for job target ranges in strategic centres.
- Optimise the productivity benefits of Sydney Metro to create smart jobs in strategic centres.
- Accessing a greater number of metropolitan jobs and centres within 30 minutes.

A Liveable City

- Improve housing choice,
- Improve housing diversity and affordability.
- Coordinating and monitoring housing outcomes and demographic trends.

20 Year Housing Targets:

Period	North District Targets (dwellings)	North Sydney Targets (dwellings)
2016-2036	97,000	3000
2021-2036	71,050	8170.75
2021-2026	23,683.3	2723.57

A Sustainable City

- Enhance the North District in its landscape
- Delivering Sydney's Green Grid

Sydney Metro Rail Project

The proposal for the study area maximises state government investment into the Sydney Metro Rail Project by optimising the site's proximity to the planned Victoria Cross Station through:

- Greater densities along the Sydney Metro corridor;
- Greater mixed uses to create a combined origin-destination station; and
- Responding to population increase and housing needs.

There is capacity for Sydney Metro to establish a network that bridges the metropolis of three cities creating a loop connection, as per the draft North District Plan.

Improved connections across the metropolis of three cities are conducive to the productivity and efficiency of a connected Sydney and eliminate redundancies in the network.

North Sydney CBD Capacity and Land Use Strategy (November 2016)

The planning proposal to implement the North Sydney CBD Capacity and Land Use Strategy was approved at gateway on 20 August 2017.

North Sydney is a key component of Sydney's global economic corridor. The Capacity and Land Use Strategy, endorsed by North Sydney Council, presents a comprehensive planning review of the strategic centre (as prescribed by the Draft North District Plan), which seeks to:

- *Take advantage of planned infrastructure upgrades by intensifying land use around significant transport infrastructure; and*
- *Identify residential development opportunities in the mixed use periphery.*

3.1 Eastern City (Draft North District Plan 2016)

North Sydney is identified as a strategic centre within the Eastern Harbour City in the Draft North District Plan (GSC 2016):

Consistency with Proposal

Productive City

- Responds to job targets whilst optimising productivity benefits of Sydney Metro for strategic centres.
- Improve accessibility to jobs and services within 30 minutes.

Liveable City

- Improves housing choice, diversity and affordability with a focus on better public transport, cycling and pedestrian links.
- Provision of cultural space dedicated to the community.

Sustainable City

- Green open space contributing to existing and proposed pedestrian network

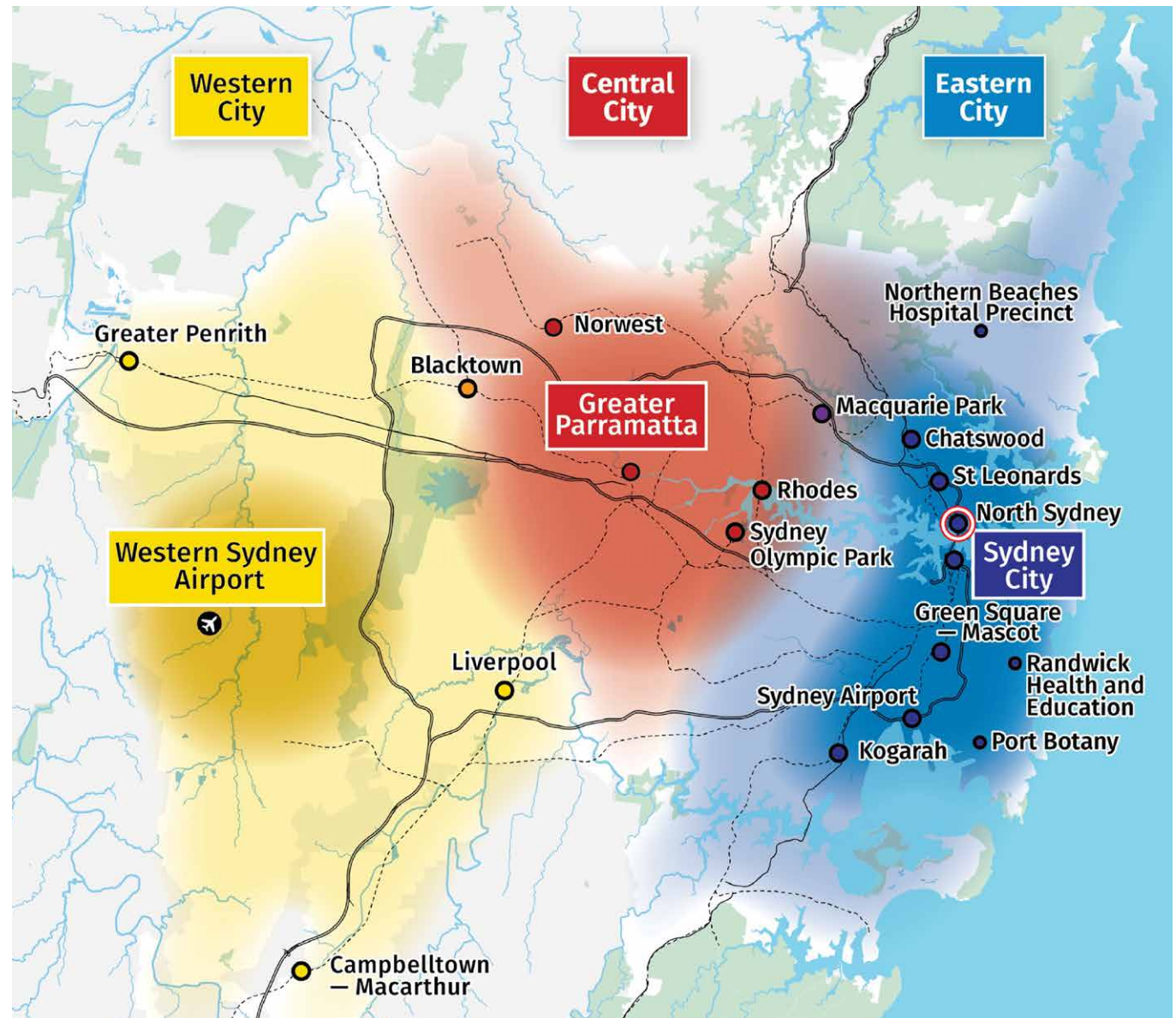


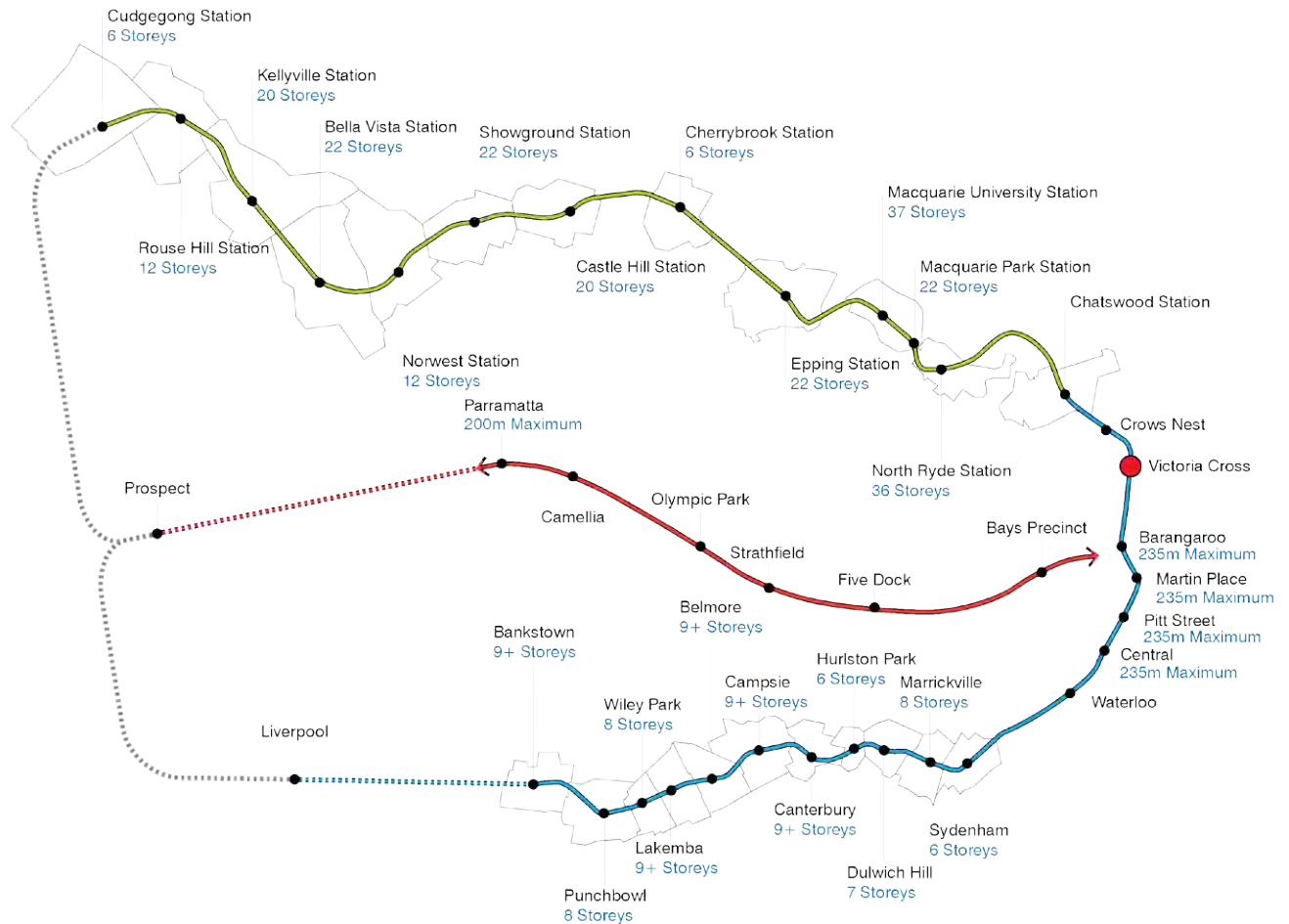
Figure 5: Metropolis of Three Cities: Global Sydney (GSC 2016)

3.2 Sydney Metro

3.2.1 Building heights at Metro Station Centres

Opportunity for greater densities along the Sydney Metro corridor will enable transit-oriented development, responding effectively to projected population growth.

Higher densities close to public transport are conducive to easing traffic congestion and improve housing choice within the North Sydney metropolitan area, particularly with affordable housing provisions.



LEGEND

- Victoria Cross Station
- Sydney Metro North West Alignment - Opens 2019
- Sydney Metro City & South West Alignment
- - - Potential South West Extension
- Sydney Metro West Alignment (NSW Government)
- - - Potential Metro West Extension
- - - Potential Loop Network Connection

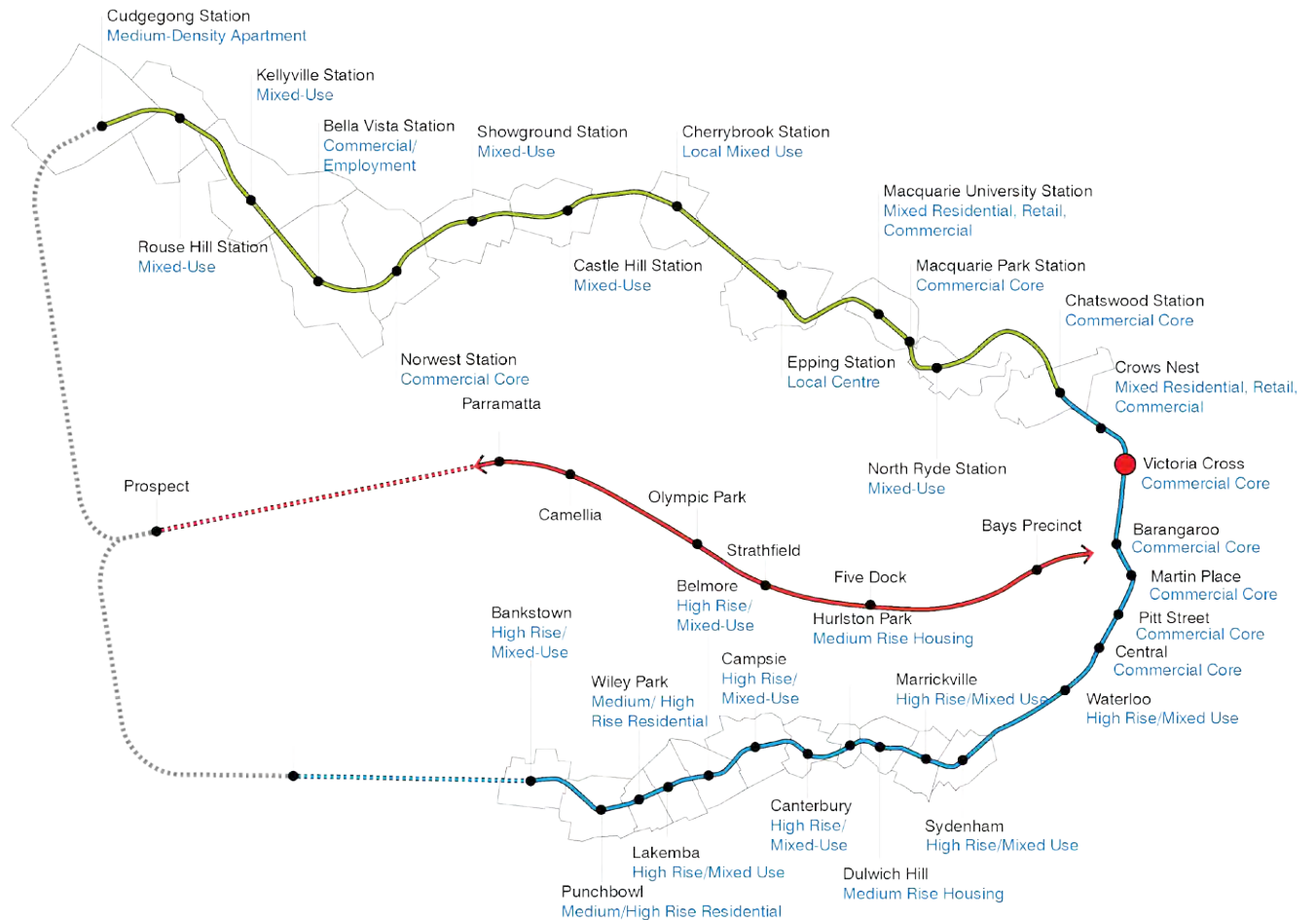


Figure 6: Building Heights proposed along Metro Station Centres

3.2.2 Land Use proposed at Metro Station Centres

As shown in Figure 7, station precincts north-west of Macquarie Park and south-west of Central incorporate a higher level of residential/mixed uses, as compared to stations between Macquarie Park and Central which have predominantly commercial uses.

This results in the daily movement of people to and from 'origin' stations (residential/mixed use) to 'destination' stations (commercial) where employment is located. As such there is an opportunity to provide a greater mix of uses in Victoria Cross Station to create a combined origin-destination station.



LEGEND

- Victoria Cross Station
- Sydney Metro North West Alignment - Opens 2019
- Sydney Metro City & South West Alignment
- - - - Potential South West Extension
- Sydney Metro West Alignment (NSW Government)
- - - - Potential Metro West Extension
- - - - Potential Loop Network Connection

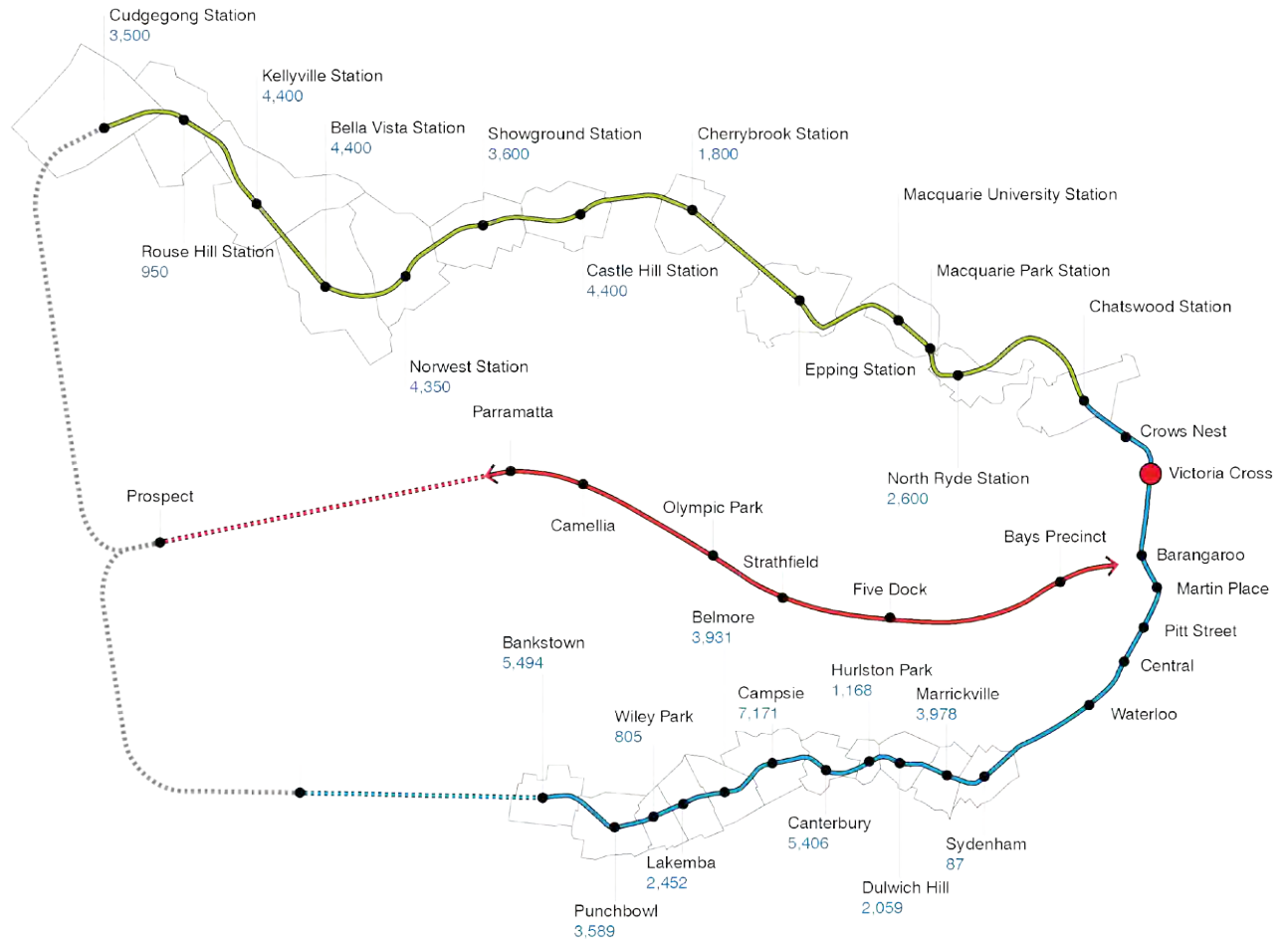


Figure 7: Land Use proposed along Metro Station Centres

3.2.3 Future Dwelling Numbers proposed

Sydney Metro aims to unlock the existing rail bottleneck for suburban trains access to the Sydney CBD.

- Expected rail patronage will increase from 168,400 to 288,000 trips in one hour AM peak by 2036.
- Total rail network capacity available on the network will increase by 60%.
- Enable 20,000 private car trips to rail in 2036 in 3.5 hour AM peak, reducing road congestion.



LEGEND

- Victoria Cross Station
- Sydney Metro North West Alignment - Opens 2019
- Sydney Metro City & South West Alignment
- - - Potential South West Extension
- Sydney Metro West Alignment (NSW Government)
- - - Potential Metro West Extension
- - - Potential Loop Network Connection



Figure 8: Future dwelling numbers proposed along Metro Station Centres

3.3 North Sydney CBD Capacity and Land Use Strategy (November 2016)

Gazettal of the Planning Proposal to implement the North Sydney CBD Capacity and Land Use Strategy shows capacity for development to achieve the greatest heights within North Sydney CBD whilst demonstrating minimal impact on the amenity of dwellings outside the North Sydney Centre.

Capacity

Notwithstanding the site's location on the boundary of the North Sydney CBD, indicative height controls identified in the study infer capacity for sites in the periphery, to enable a height transition from the CBD to the lower scale residential streets east of the site.

Land Use

North Sydney's location in the heart of Sydney's global economic corridor presents opportunity to provide mixed land uses that will contribute to the improvements of North Sydney as an economic, socially diverse and resilient strategic centre.



Figure 9: Indicative Future Height Controls in RLs (CLUS 2016)



4.0 Context

4.1 Public Realm

4.1.1 Open Space

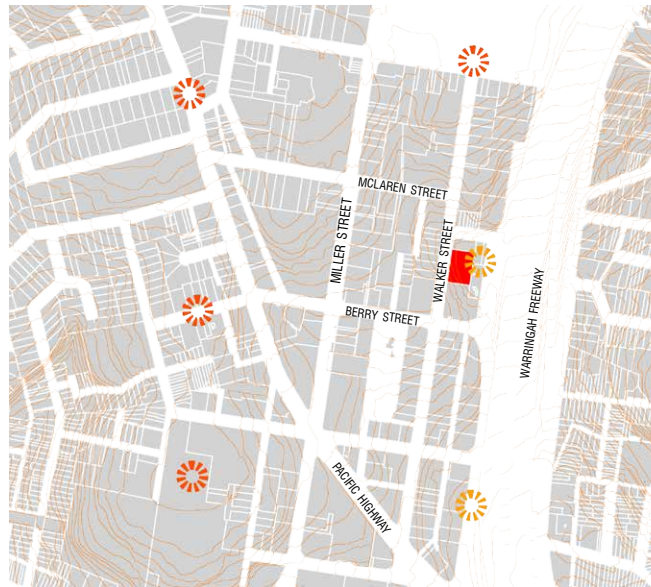
Deficiencies in public parks and plazas within vicinity of the site are rectified through the provision of open space provided by private entities. These spaces are generally well maintained as their success contributes to:

- Pedestrian amenity;
- Opening up the streets; and
- Provision of connections between commercial centres and residential streets of North Sydney.



4.1.2 Topography

- The site slopes from west to east with substantial level changes across surrounding streets
- Several retaining walls surround the site including:
 - Heritage retaining wall on Walker Street;
 - Median on Hampden Street; and
 - Boundary of the subject site and Walker Street footpath.



LEGEND

- Subject Site
- Contour (2.0m intervals)
- ☀ High Point
- ☀ Low Point

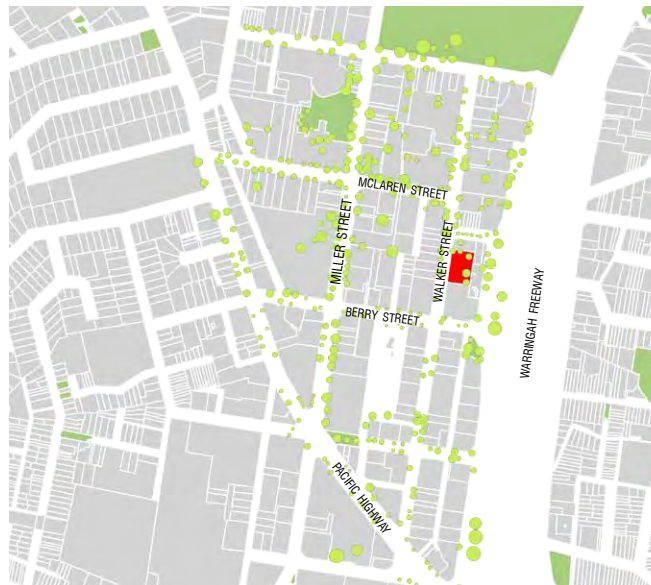
Figure 11: Topography



4.1.3 Trees & Vegetation

Notwithstanding deficiencies to public open space around the area, there are significant street tree planting within vicinity of the site with vegetation corridors to the:

- South of the site immediately adjacent to Warringah Freeway; and
- Between Hampden Street and Warringah Freeway.



LEGEND

- Subject Site
- Public Open Space
- Existing Tree

Figure 12: Trees & Vegetation

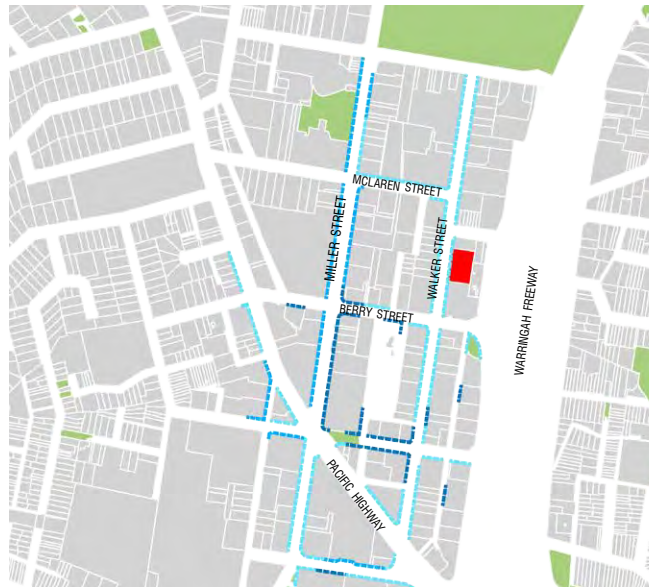


4.2 Activities

4.2.1 Active Edges

The relationship between a building's edge and its public domain can offer opportunities for interaction to activate the street. Physical features that contribute to active edges include:

- Clear-glazed façades that allow visual engagement to building interiors;
- Continuous awnings;
- Frequent pedestrian entries;
- Minimal vehicular entries; and
- Minimal blank walls.



LEGEND

- Subject Site
- High Active Edge
- Moderate Active Edge
- Low Active Edge

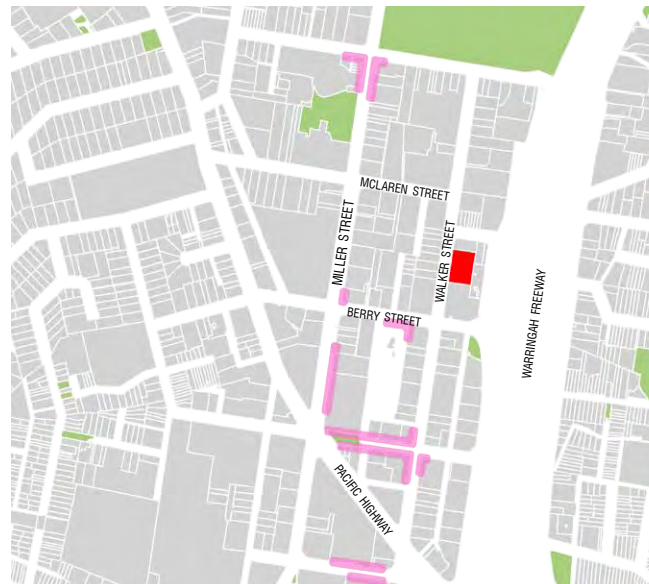
Figure 13: Active Edges



4.2.2 Activity Clusters

The primary market in North Sydney's activity centres accommodate for workers, detracting these areas as a destination place for the wider community.

The absence of workers outside business hours has an adverse impact on activity around the area. A need for revitalisation is identified to attract people into these centres.



LEGEND

- Subject Site
- Retail Clusters

Figure 14: Activity Clusters



4.2.3 Ward Street Precinct Plan

The Ward Street Precinct Plan, endorsed by North Sydney Council, responds to Sydney Metro's planned Victoria Cross Station adjacent to the North of Centre (NOC) Precinct.

"...to ensure such a major infrastructure investment is coupled with an improved public domain design and transit-oriented development that contributes to North Sydney's residential and business needs."

(North of Centre Precinct Plan 2016, p.4)

The study area is bound by McLaren Street to the north, Berry Street to the south, Miller Street to the west and includes a number of allotments on the eastern side of Walker Street, south of Hampden Street.

Objectives and Principles of the plan include:

- Advocate design excellence best practice and sustainability in the public domain;
- Capitalise on place-making opportunities associated with Metro;
- Facilitate safe, attractive, high quality community spaces to best practice; prioritise pedestrian amenity; and
- Ensure parking provision responds to Metro.

Increased Heights

The precinct plan identifies opportunity for height increase in key areas throughout the study area where minimal or no adverse impacts occur to public open space.

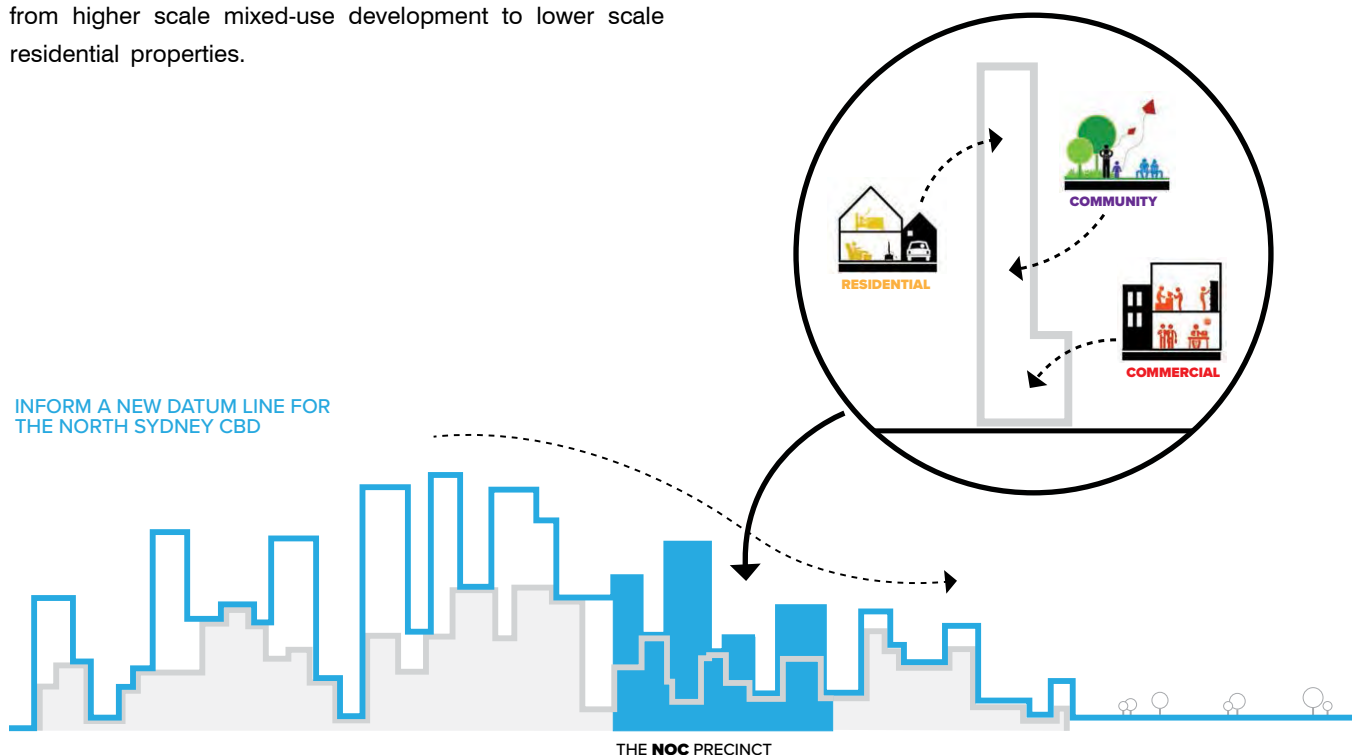
Given the subject site's identification as an opportunity site for potential future development opportunity exists to deliver high quality architectural solution with increased heights that appropriately respond to the context of the NOC precinct.

Increased height on the site will enable height transitions from higher scale mixed-use development to lower scale residential properties.

Place-Making

A key priority identified in the plan is to *"increase place capital in North Sydney by providing a collaborative community hub and public domain"*.

Increased height capacity is balanced through significant public domain improvements ensuring the urban design framework that leads the plan, ties into the planned Victoria Cross Metro Station.



THE NOC PRECINCT

Figure 15: Source: NOC Precinct Plan prepared by Roberts Day (November 2016)

4.3 Built Form

4.3.1 Building Footprints

- To the west of the site is a large residential building and smaller heritage listed properties incorporated within a larger development.
- To the north of the site is a number of heritage listed residential terraces located on Hampden Street.



LEGEND

- Subject Site
- Building Footprint
- Heritage Items

Figure 16: Building Footprints

4.3.2 Building Heights

Existing planning controls subject the site to a maximum height limit of 12.0 metres.

Indicative future height controls illustrated in Figure 17 create a height transition from large development sites to adjacent residential neighbourhoods to retain amenity, particularly between Berry Street and Ridge Street adjacent to St Leonard's Park.

Indicative heights shown in Figure 17 are in accordance with the Planning Proposal to implement the North Sydney CBD Capacity and Land Use Study (November 2016).

The dominant built form within the North Sydney CBD are single towers which exhibit capacity for height increase, as identified in the North Sydney CBD Capacity and Land Use Strategy (2016).

Provided potential for future development to exhibit heights as illustrated in Figure 17, the site presents opportunity for development which remains in harmony with the existing lower-scale residential developments, east of the North Sydney CBD, whilst demonstrating increased height capacity compatible with indicative heights endorsed by North Sydney Council.

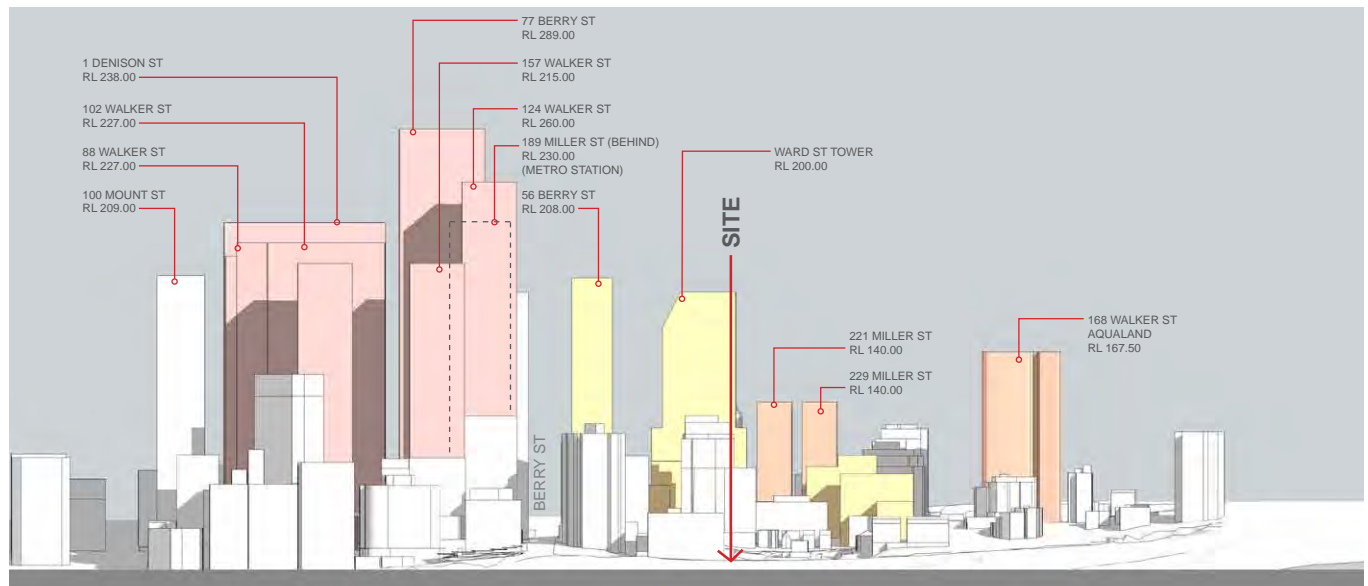
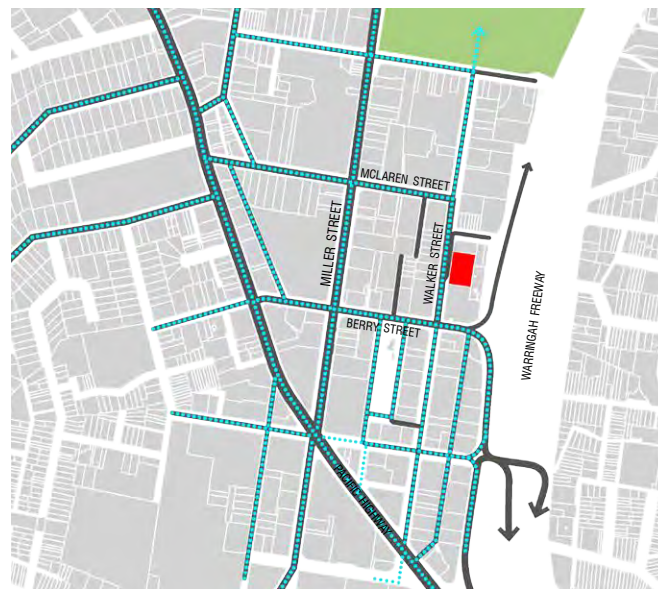


Figure 17: Building Heights in accordance with North Sydney Centre CLUS, 2016 (Kannfinch)

4.4 Access

4.4.1 Pedestrian Movement

- The Pedestrian network generally consists of the footpaths running along both sides of the roads along the surrounding road network. There is little permeability through the Ward Street Precinct at present.
- The existing Walker Street footpath is poorly finished as it is cluttered with bins and electrical poles and is very narrow.



LEGEND

- Subject Site
- ⋯ Pedestrian Paths

Figure 18: Pedestrian Movement



4.4.2 Public Transport

- The public transport network in the vicinity of the site consist of bus and rail services. A large number of bus routes run along Miller Street which is 400m from the subject site.
- Future Metro Station is located within 200m from the subject site.
- T1 northern line train service runs from North Sydney Train Station within 800m from the subject site.



LEGEND

- Subject Site
- T Train Station
- Bus Station
- ⋯ Bus Route

Figure 19: Public Transport



4.4.3 Vehicle Movement

- The subject site is in close proximity to two high-capacity roads (The Pacific Highway and the Warringah Freeway). In addition, Miller Street in the main arterial route running through the North Sydney CBD area.



LEGEND

- Subject Site
- Arterial Road
- Major Collector Road
- Minor Collector Road
- Local Roads

Figure 20: Vehicle Movement



4.4.4 Existing Site Access & Movement

- The main vehicular access to the development will be off Walker Street.
- On-street parking is currently located along the eastern side of Walker Street that extends along the local access road towards Hampden Street.



LEGEND

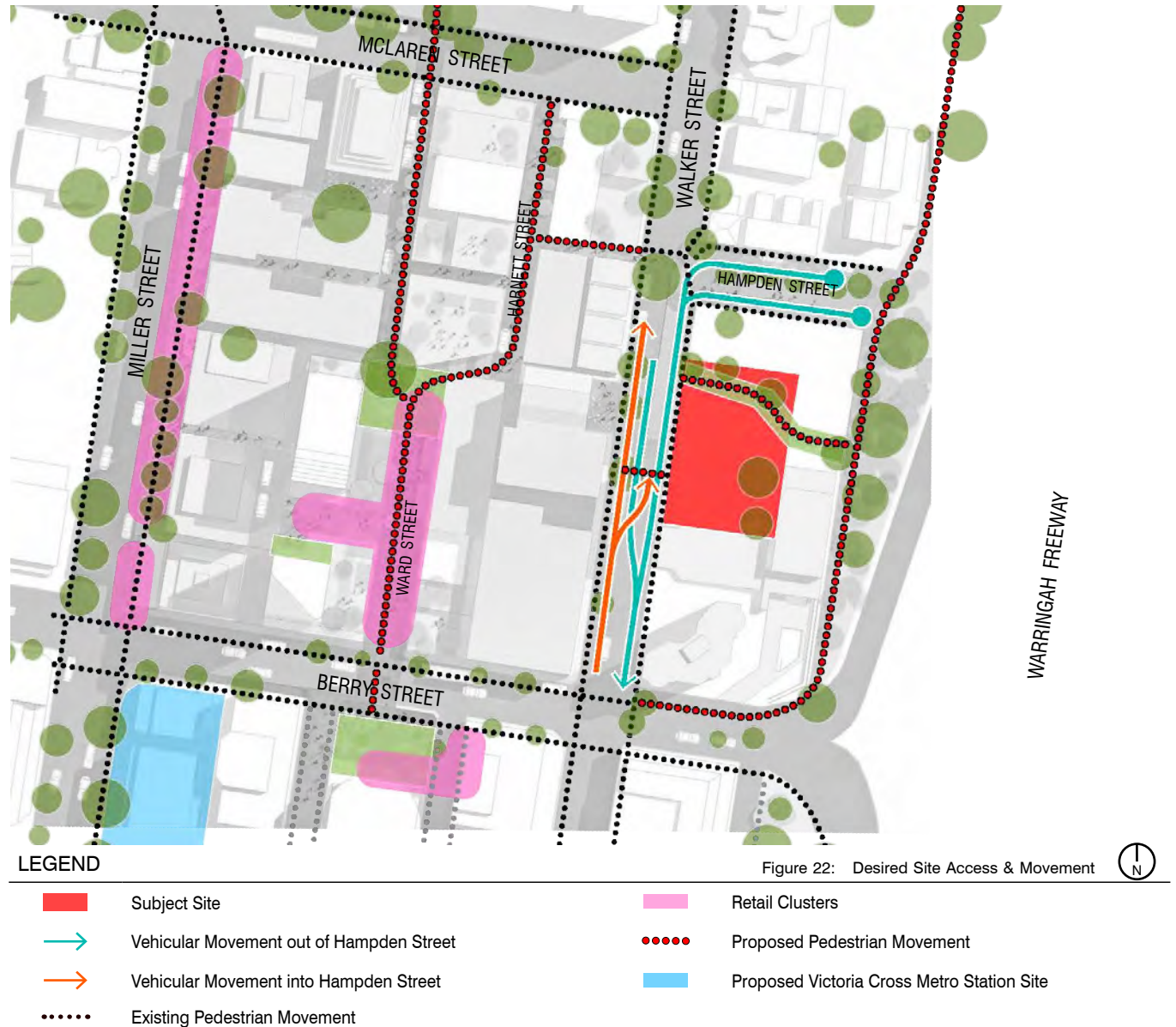
- Subject Site
- Vehicular Movement out of Hampden Street
- Vehicular Movement into Hampden Street
- Existing Pedestrian Movement

Retail Clusters

Figure 21: Existing Site Access & Movement

4.4.5 Desired Site Access & Movement

- It is proposed to ban left-turn movements into the development from Walker Street - vehicles travelling southbound as it can not be safely undertaken with vehicles required to undertake a three point turn.
- Access to the site is proposed via Berry/Walker Street intersection and turn right.
- The proposed development will assist in increasing the permeability to the Ward Street Precinct by proposing a pedestrian link through the site.



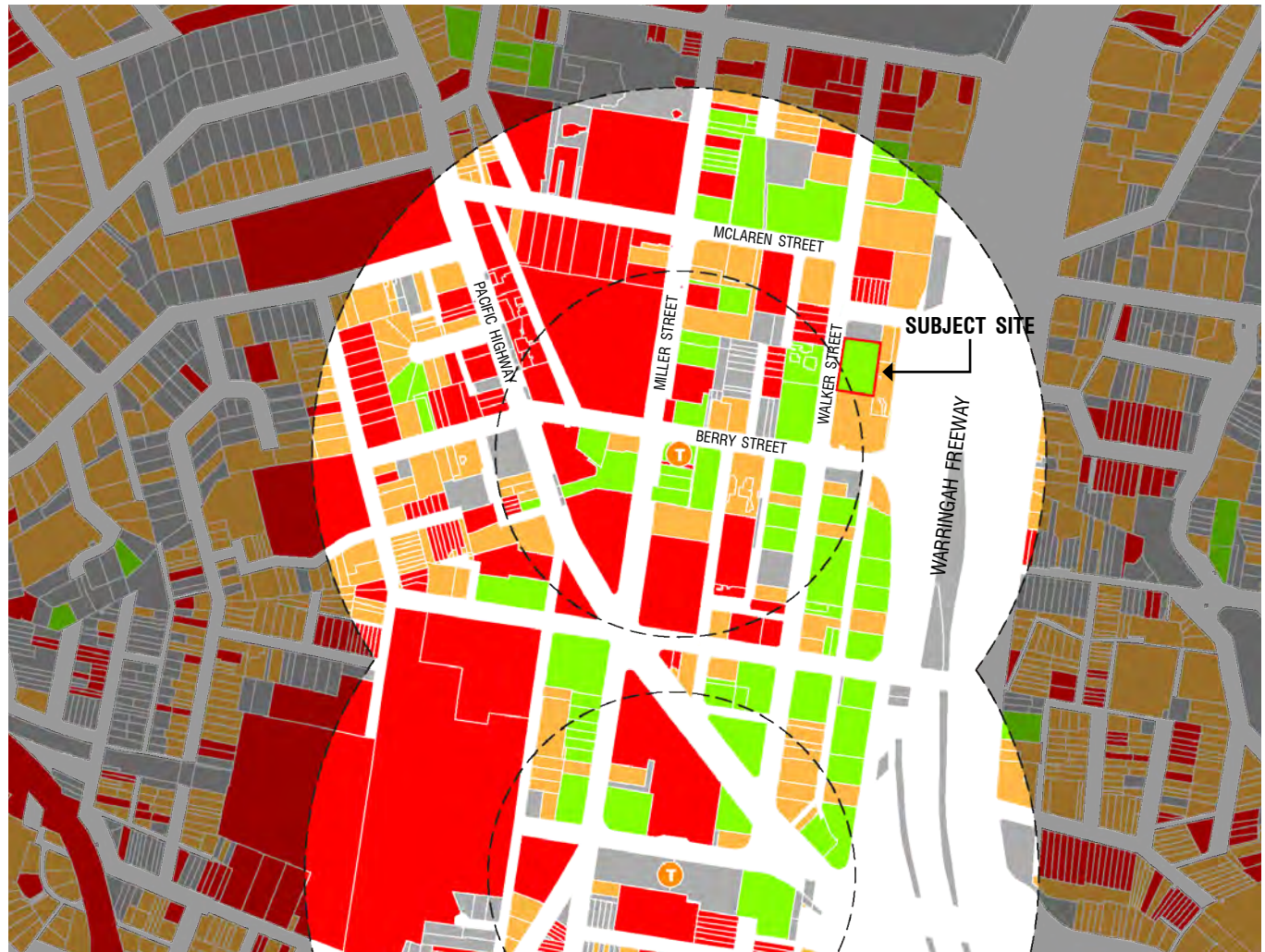
4.5 Lots Susceptible to Change

Susceptibility to Change analysis involves the investigation of:

- Heritage Items;
- Ownership patterns;
- Planning Proposals and Development Applications;
- Building age; and
- Lot configuration and dimensions.

Allotments considered Susceptible to Change are those that:

- Do not have heritage listing;
- Not in Strata Title Ownership, with the expectation of those sites where at least 75% of units are in single ownership;
- Form part of blocks with complex ownership pattern;
- Have a Development Application or Planning Proposal approval or currently under assessment;
- Are ageing;
- Have a lot width greater than 24 metres and a depth greater than 33 metres; and
- Preferably corner allotments.



LEGEND

	Subject Site		Likely to Change
T	Train Station		Unidentified Lot Ownership
	Highly Unlikely to Change		
	Unlikely to Change		

Figure 23: Lots Susceptible to Change



4.6 Lots Developable

In summary of the Susceptibility to Change analysis the following allotments have been identified as developable Sites.

- 78 Allotments have been identified with the potential to amalgamate to create desirable lots to develop.



LEGEND

	Subject Site		Heritage
	Train Station		Heritage Conservation
	Developable Sites		

Figure 24: Lots Developable



4.7 Important Considerations

East Walker Street Precinct

- East Walker Street was removed from the Draft Ward Street Precinct Master Plan with the recommendation to be 'separately pursued' by council.
- "Five 'opportunity sites' having been identified for redevelopment" including the subject site.
- These opportunities sites are considered to be underutilised within the context of the North Sydney Centre.
- "The investigation of this site has been deferred to future discussion with relevant landowners who may seek to initiate a planning proposal"(p24. North Sydney Council Report on the Draft Ward Street Precinct Masterplan, 1 December 2016.



4.8 Desired Future Character

4.8.1 Desired Future Character Statement

Hampden Neighbourhood (North Sydney DCP 2013)

- Mixture of multi-level residential flat buildings with older low-rise residential flat buildings.
- Pedestrian walk along the western side of Warringah Expressway accessed from Hampden Street.
- Built Form:
 - To maintain views
 - High sandstone retaining walls at ground level
 - Maintain existing setbacks along Walker Street
 - Off-street and below ground car parking for all residential flat buildings
 - Sandstone walls along Walker Street
 - Landscaping within front setback
 - Mature Vegetation on median enhanced areas

4.8.2 New Desired Future Character Statement

Potential for redevelopment exists where high quality built form and public domain is achieved through compliance with the defined New Desired Future Character, as opposed to numerical standards. A key priority for this area's character will be outlined by opportunities surrounding the established Victoria Cross Station along the Sydney Metro Line:

- Greater height and scale, compatible with development along the Sydney Metro Line.
- Enable the transformation of the Victoria Cross Station into a combined 'destination and origin' station.
- To assist in the success of the Sydney Metro system by providing the appropriate density thresholds for each centre.
- Built form:
 - Building footprints sympathetic to heritage listed properties within vicinity of the site.
 - Increased heights compatible with strategic intent for North Sydney.
 - Establish height transition from large development sites to adjacent residential neighbourhoods.
 - Support public transport network within an 800m walking catchment of the subject site.
 - Improve pedestrian movement along the western side of Warringah Expressway.

4.8.3 Proposal Principles

1. Generate a high quality building form that respects and integrates within its immediate context and the proposed Ward Street master plan while considering the heritage items surrounding.
2. Improve the quality and significance of the public domain of the site and the proposed Ward Street Precinct.
3. To provide a distinctive architectural contribution to the area and the North Sydney skyline. That respects and enhances the existing heritage items and streetscape surround the site by giving special consideration to the massing, heights and proportions of the surrounding items.

5.0 Opportunities & Constraints

5.1 North Sydney Strategic Centre

North Sydney is identified in the Draft North District Plan as a commercial centre that is an integral part to the internationally-competitive Sydney CBD.

Relevant Livability Priorities that this proposal can satisfy include:

- Improve housing choices; and
- Deliver North District's 5 year housing supply target for North Sydney of 3,000 dwellings.

Relevant aims and direction specifically for North Sydney include:

- Maximise the land use opportunities provided by the new station;
- Expand after hour activities; and
- Improve amenity by reducing the impact of vehicles on pedestrians.

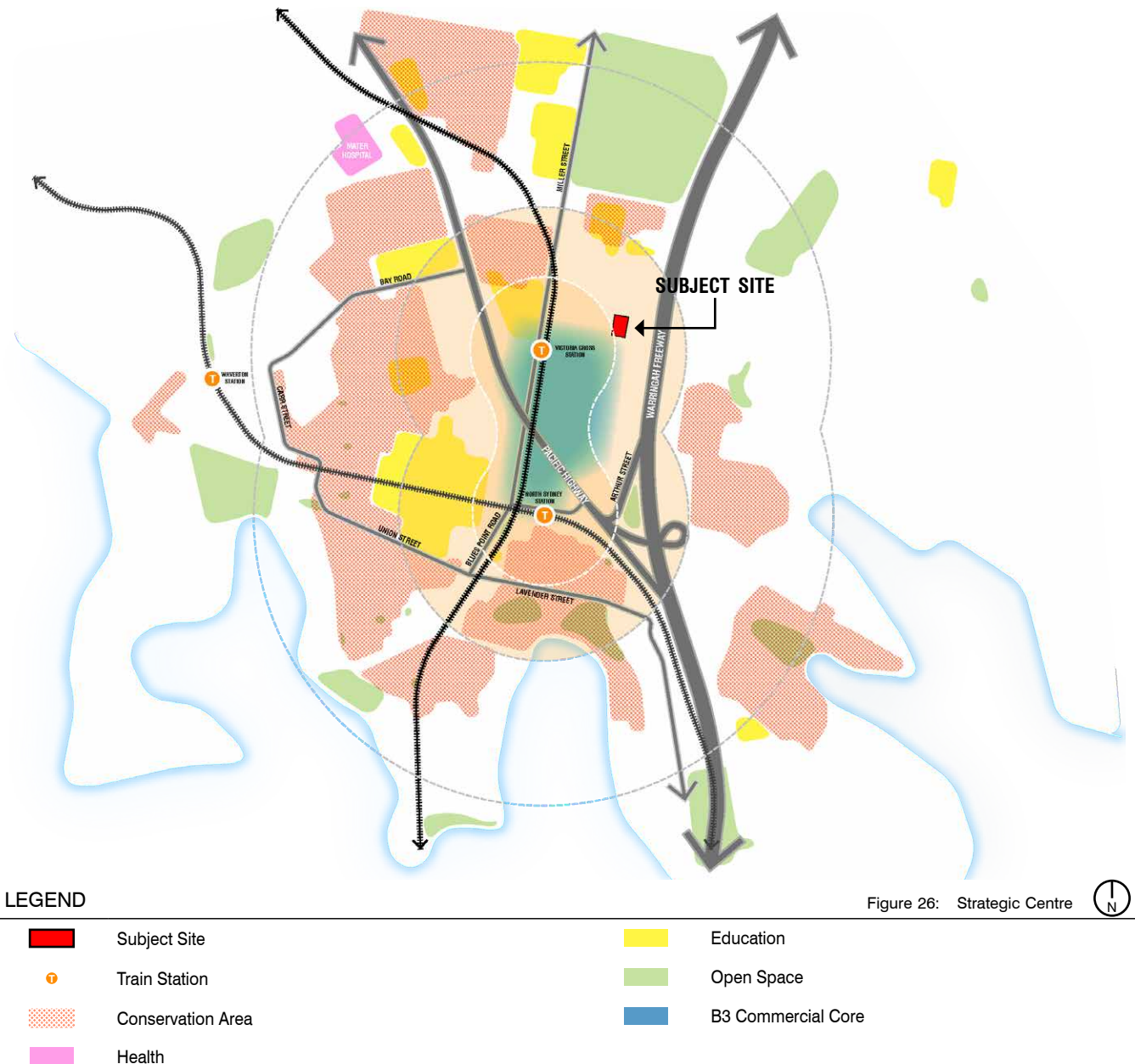


Figure 26: Strategic Centre



5.2 Linear Central Business District

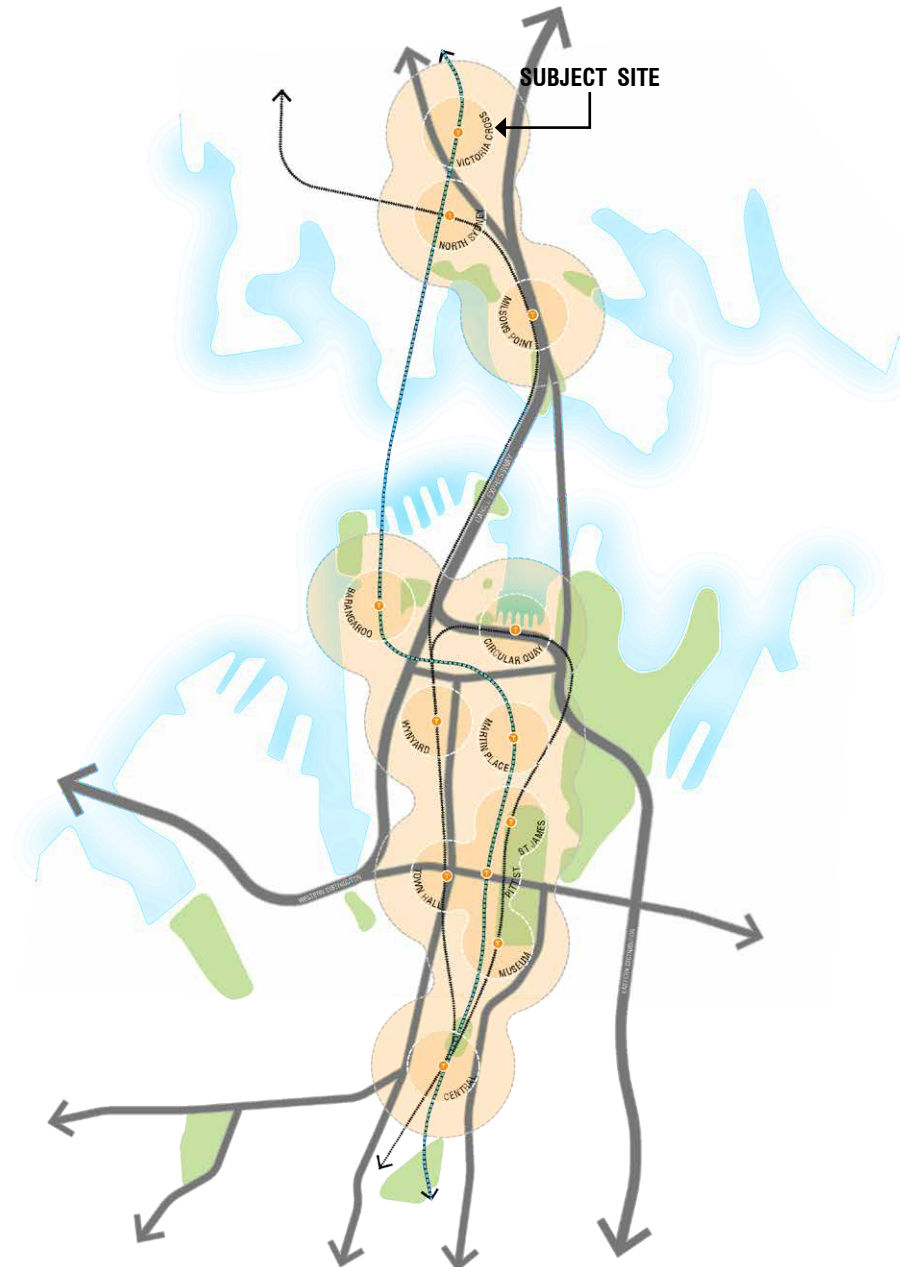
North Sydney's location directly north of Sydney's CBD establishes a linear connection. To assist in the success of Sydney Metro system is through providing the appropriate density thresholds for each of the centres. The study area will establish a City Centre typology that is characteristic of the following development scale:

- Core - within 200m of the station.
 - High rise - 300+ dw/ha
- Primary walking catchment - within 400m of the station and core.
 - High Rise - 100-300 dw/ha
- Secondary walking catchment - within 800m of the station and core.
 - High and Medium Rise - 100+ dw/ha

LEGEND

-  Train Stations
-  Major Road Network
-  Existing Rail Network
-  Future Sydney Metro City Network
-  200m Walkable Catchment
-  400m Walkable Catchment
-  Open Space

Figure 27: Linear CBD



5.3 Summary

There are limited future urban renewal opportunities in walking distance to the centre and public transport nodes.

Such constraints include:

- The land is highly fragmented;
- There is a significant amount of heritage constrained land (both heritage items or conservation areas);
- Residential uses are only permitted on the periphery of the CBD core and the allowable scaling varies significantly; and
- There is extensive strata titling of land in potentially suitable area for residential urban renewal.



LEGEND

	Subject Site		Education
T	Train Station		Open Space
	Conservation Area		High Growth / Development Area
	Health		B3 Commercial Core

Figure 28: Strategic Context Summary

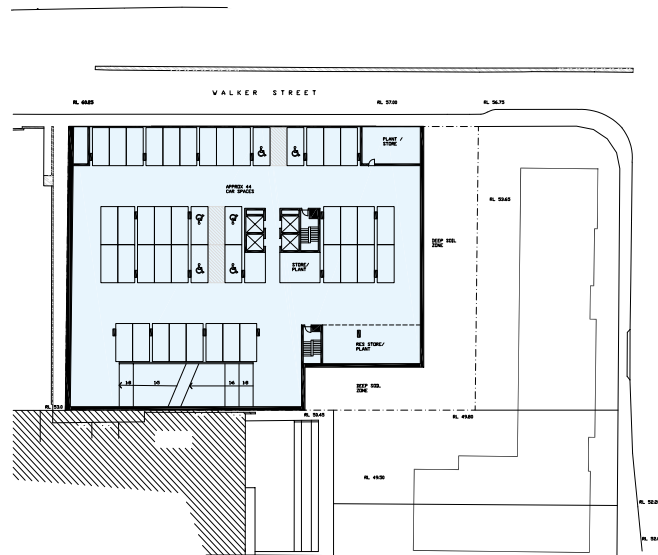


6.0 Proposal

6.1 Buildings

6.1.1 Typical Basement Plan

- Provides approximately 44 car spaces.



LEGEND


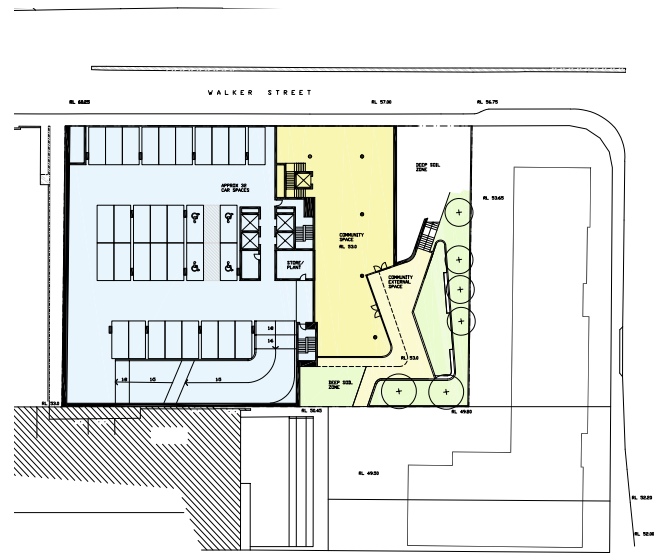
 Built Form

Figure 29: Basement Plan (Kannfinch)



6.1.2 Lower Ground Floor Plan

- 390m² is dedicated for community use; and
- Approximately 32 car spaces are provided.



LEGEND



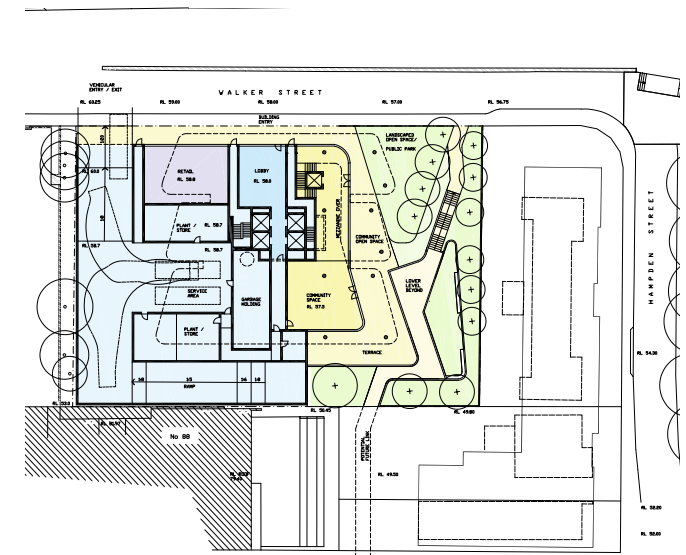
 Built Form
 Landscaping
 Community Space

Figure 30: Lower Ground Plan (Kannfinch)



6.1.3 Ground Floor Plan

- 80m² is dedicated for retail; and
- Approximately 1,125m² is dedicated for community use which is located on ground level, mezzanine level and level 1.



LEGEND





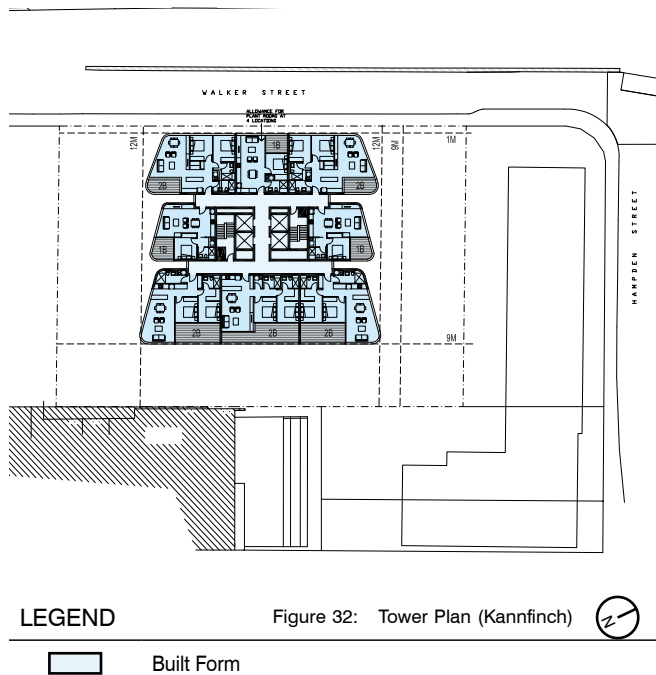
 Built Form
 Landscaping
 Community Space
 Retail

Figure 31: Ground Plan (Kannfinch)



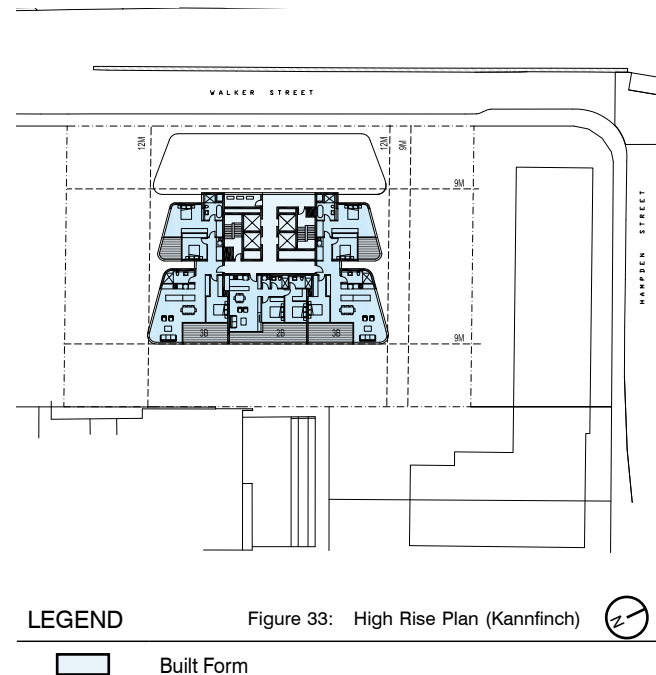
6.1.4 Typical Tower Plan

- 31 Storeys.
- Approximate residential GFA of 20,615m².



6.1.5 Typical High Rise Plan

- 14 Storeys (Including the 2 storey penthouse).
- Approximate residential GFA of 5,820m².



6.1.6 Section - East West

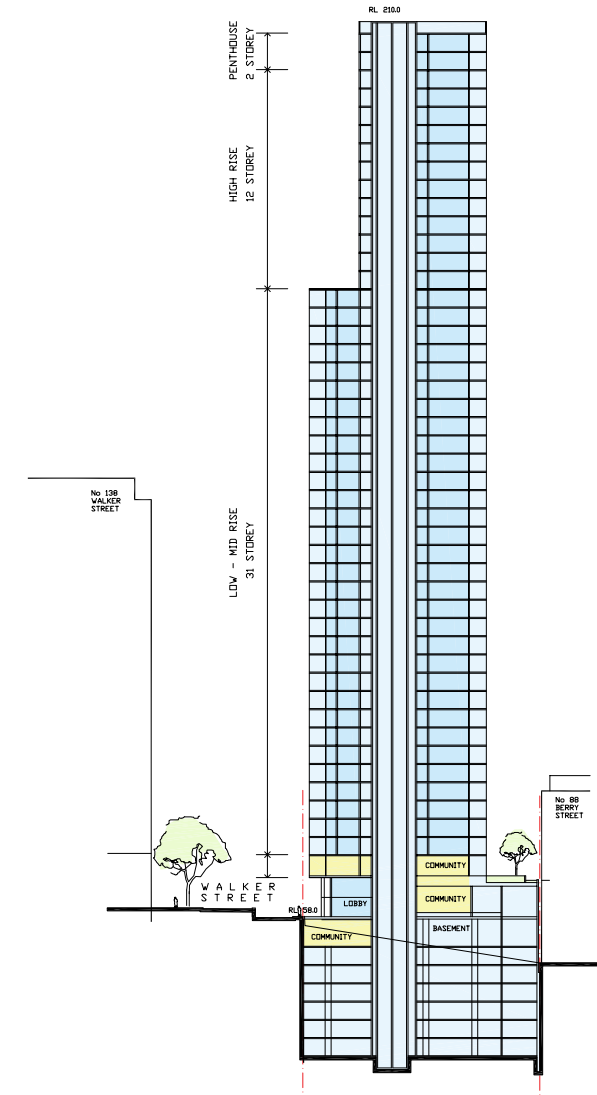


Figure 34: Tower Section Plan (Kannfinch)

6.1.7 3D Massing View

The proposal achieves an RL of 210.00 (47 storeys) on the site, compatible with proposed built form within North Sydney Centre.

Proposed controls will enable:

- A larger captive resident population to service existing employment generating commercial uses for the precinct.
- Development aligned to a 'Strategic Centre' precinct with acceptable relationships between indicative built form envelopes.
- Consistency with the desired future character of North Sydney whilst maximising government infrastructure to its full potential.

The proposal is in harmony with indicative height capacity identified in the planning proposal to implement the North Sydney CBD Capacity and Land Use Strategy (2016).

The proposal presents built form through a single-tower, compatible with existing and proposed development within North Sydney. 3D Massing of the proposed building, illustrated in Figure 35, show compatibility with indicative height outlined in the strategy where built form enables height transitions from the higher density mixed-uses to lower density residential to the east.

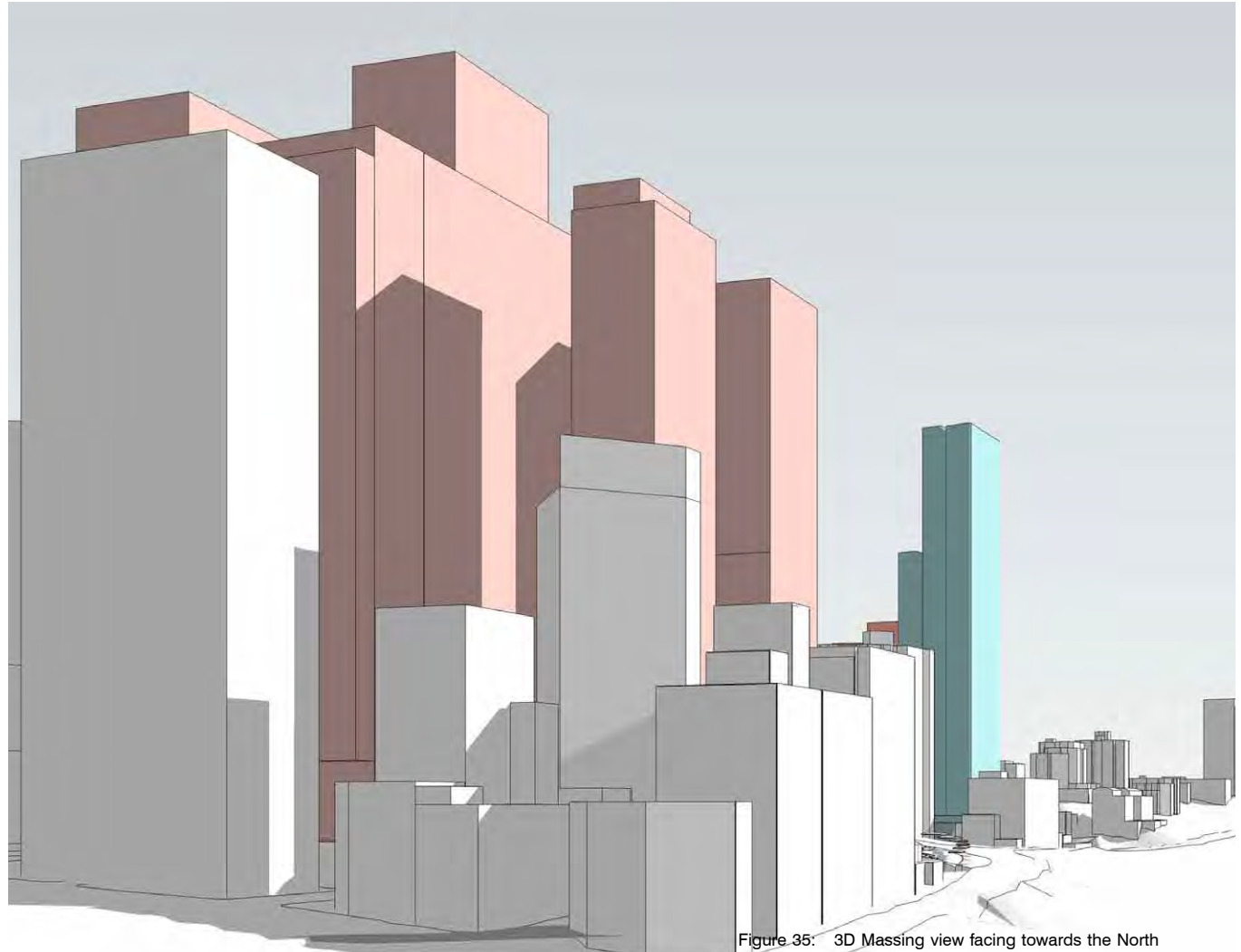


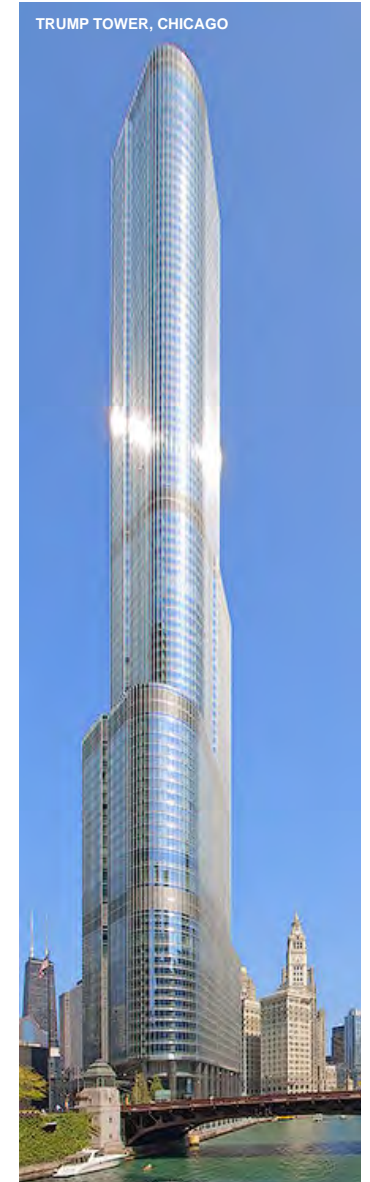
Figure 35: 3D Massing view facing towards the North

LEGEND

- Proposed Building
- Land Use Strategy Buildings

6.1.8 Precedent Images





6.2 Landscape

6.2.1 Ground Level - Landscape Program

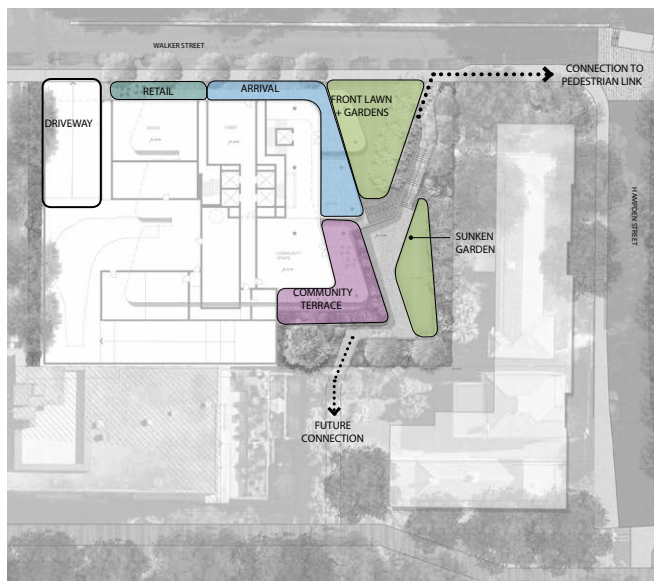
- Providing a connection to the “Active Link” identified in the Ward Street Masterplan.

6.2.2 Ground Level - Landscape Concept

- Existing trees to be retained where possible;
- New street trees to improve amenity fronting Walker Street; and
- Deep soil planting to boundary through the use of turfing and planting buffers.

6.2.3 Podium Level - Landscape Concept

- The use of medium size trees and screening plants to the south and east to provide privacy.



LEGEND

- Landscaping
- Arrival Forecourt
- Community Terrace
- Retail

Figure 36: Landscape Program (Urbis)

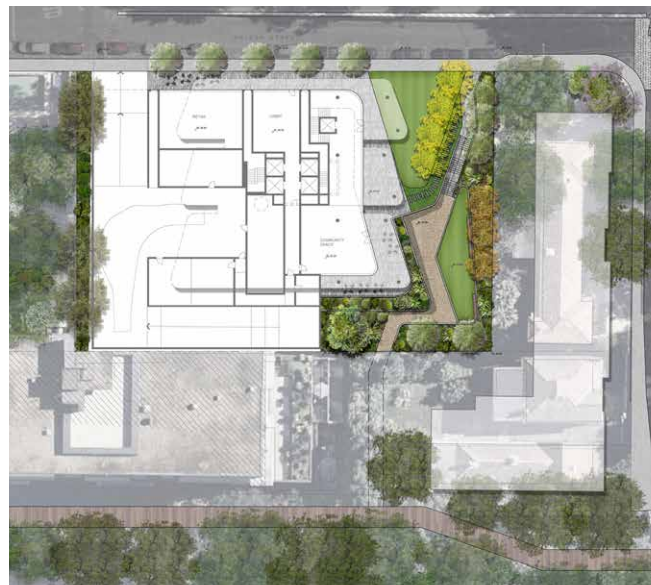


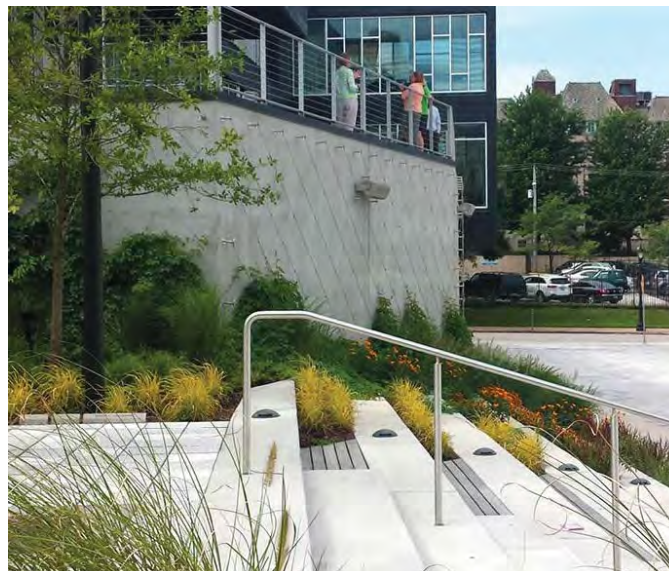
Figure 37: Ground Landscape Concept (Urbis)



Figure 38: Podium Landscape Concept (Urbis)



6.2.4 Precedent Images



7.0 Assessment of Proposal

7.1 Public Realm

7.1.1 Pedestrian Movement

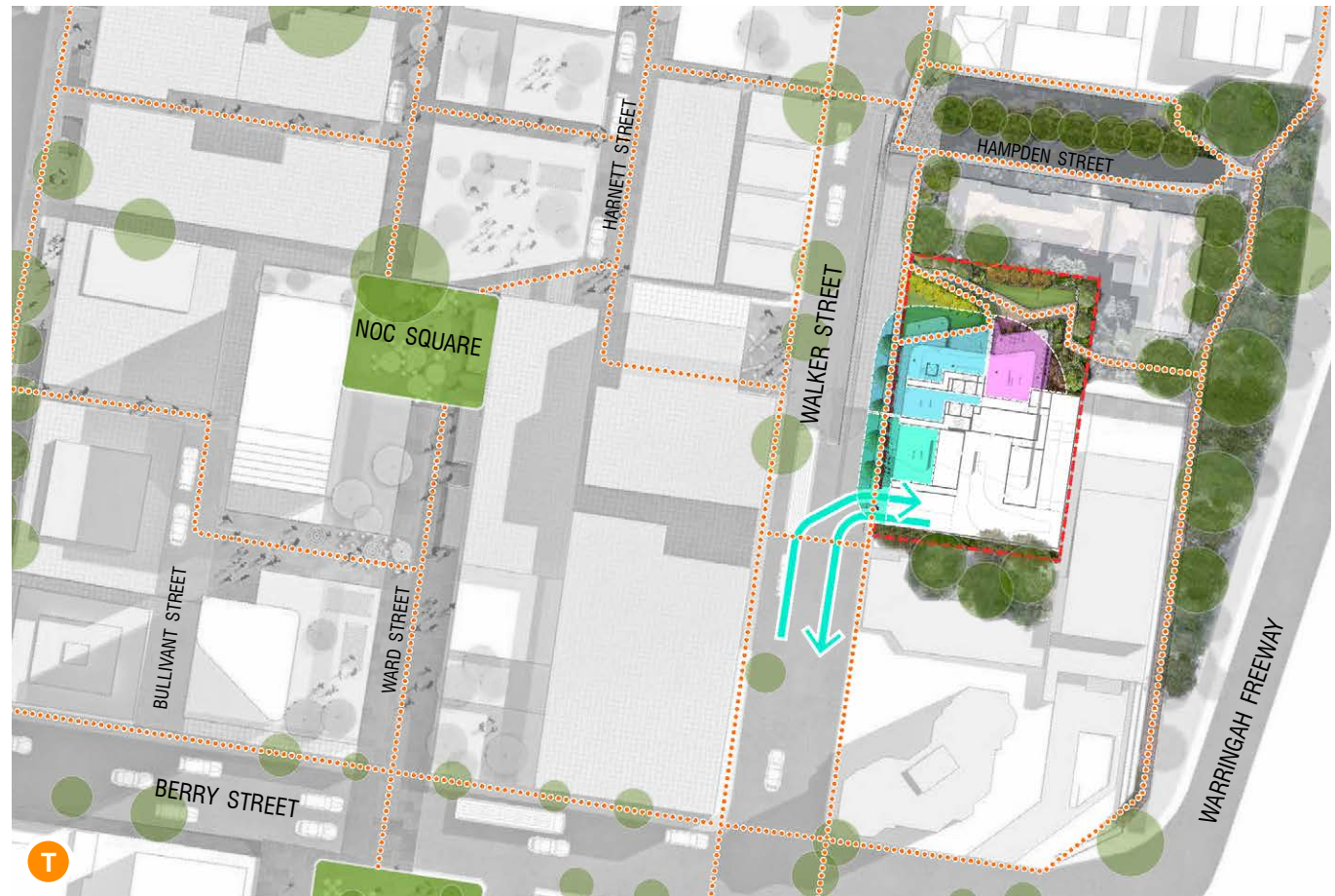
Pedestrian routes will be strengthened by:

- Positioning the residential lobby entry addressing Walker Street to encourage pedestrian traffic and activity;
- Creating a pedestrian link crossing the site to the future 'Active Link' to St Leonards Park, further strengthening the connection to the proposed Ward Street Precinct;
- Ground level retail to provide casual street surveillance;
- Providing a community space on ground level facing towards the rear boundary providing passive surveillance on the proposed publicly dedicated open space and pedestrian link through the site.

7.1.2 Activities

The proposal supports activation of the site directly adjacent to the NOC precinct, with the provision of:

- 865 m² Dedicated public open space; and
- 1,515 m² dedicated community space that has potential to be adapted as:
 - spaces for food and beverage;
 - public art exhibition space; and/or
 - space for recreational activities



LEGEND

- | | | | |
|--|------------------------------|--|---|
| | Subject Site | | Retail Casual Street Surveillance |
| T | Victoria Cross Metro Station | | Arrival Casual Street & Open Space Surveillance |
| ➔ | Vehicle Access to Site | | Community Space Casual Open Space Surveillance |
| | Pedestrian Movement | | |

Figure 39: Public Realm



7.2 Built Form

7.2.1 Building in Context

The proposal introduces exceedances in permissible FSR and height prescribed by North Sydney LEP 2013, allowing redevelopment on the site to include:

- 284 residential apartments (including 5% affordable housing);
- 865m² of publicly dedicated open space;
- 1,515m² dedicated space for a community centre; and
- 80m² of retail space.

(EIA prepared by Hill PDA Consulting 2017)

Diagrams prepared by *Kann Finch* (right) illustrate built form proposed to be developed within the North Sydney Centre.

* in accordance with North Sydney Capacity and Land Use Study 2016

Given the site's location on the periphery of the North Sydney CBD, the proposal presents built form that appropriately transitions into lower-scale development, aligning with capacity for increased heights per the Ward Street Precinct Plan and North Sydney CBD Capacity and Land Use Strategy (November 2016).

LEGEND

- Proposed Building
- Ward Street Precinct Buildings
- Land Use Strategy Buildings
- Approved DA Buildings

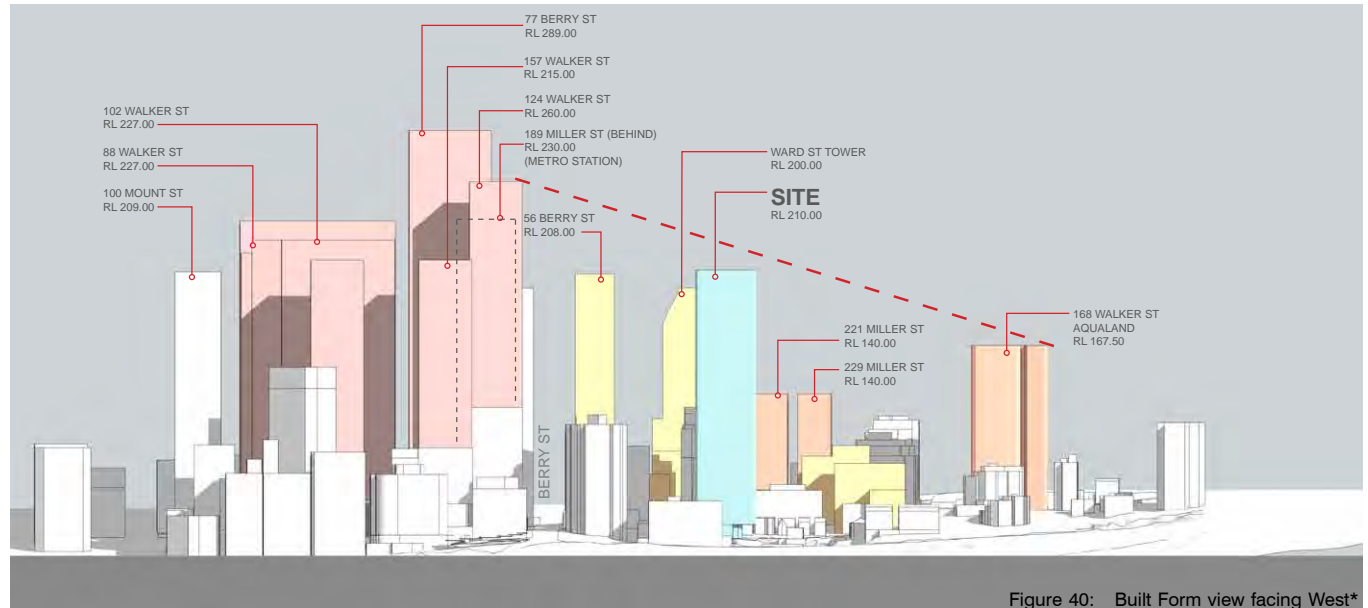


Figure 40: Built Form view facing West*

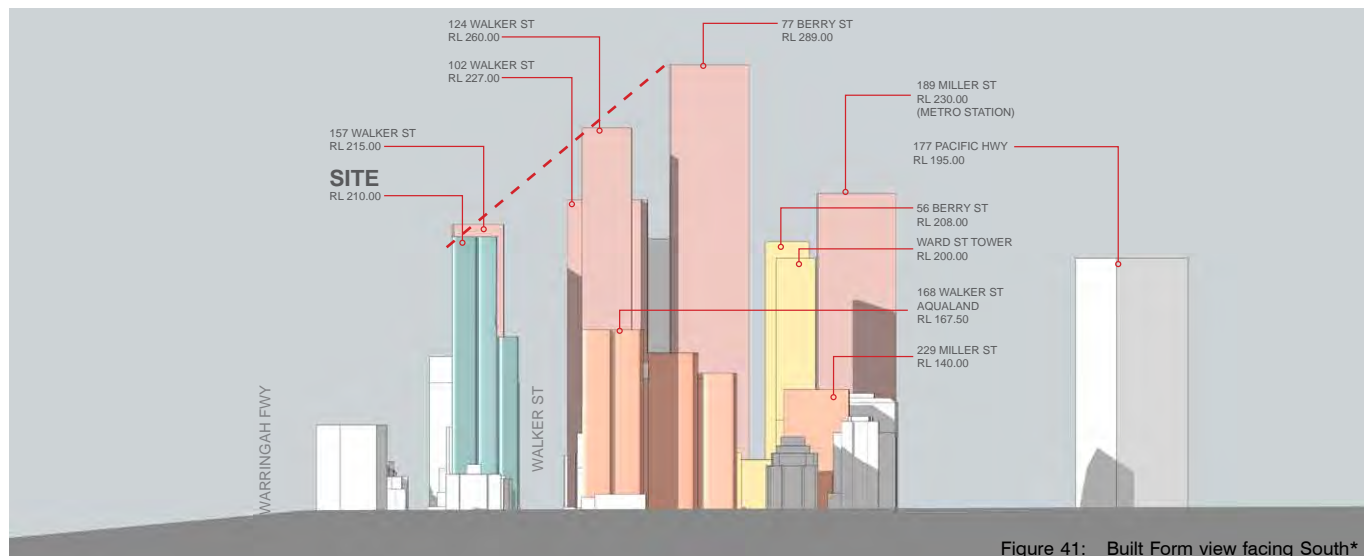
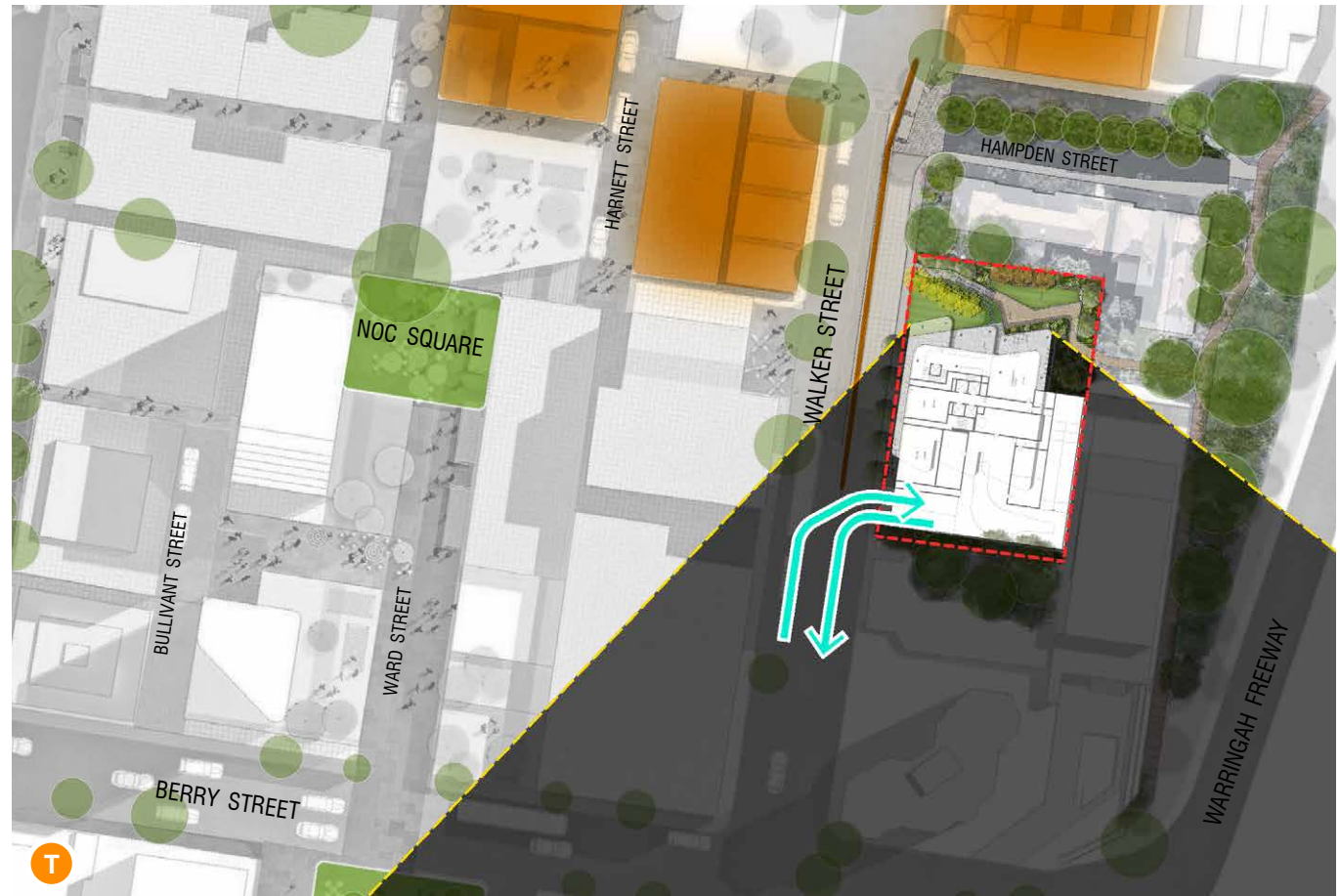


Figure 41: Built Form view facing South*

7.2.2 Heritage Items

The proposed development is sympathetic of various heritage items within vicinity, where:

- View corridors to heritage items are not impeded or blocked by the proposal;
- The proposal will not alter the stone wall along Walker Street and will continue to serve as a split level road divider;
- Vehicular access into the site along Walker Street is located to the southern boundary, away from heritage items; and
- No overshadowing occurs to identified heritage items within immediate vicinity of the site, as per figure 41 which illustrates the 9am - 3pm shadow zone of the proposed development:
 - Setbacks incorporated in the tower and podium ensure no overshadowing to identified heritage items along the western side of Walker Street.
 - The seven heritage items along Hampden Street located north of the proposed tower are not affected by overshadowing from the proposal.



LEGEND

- Subject Site
- T Victoria Cross Metro Station
- Vehicle Access to Site
- Heritage Items

Figure 42: Heritage Assessment



Shadow Zone between 9am & 3pm

7.2.3 3D Massing Views

The proposal achieves an RL of 210.00 (47 storeys) on the site, compatible with proposed built form within North Sydney Centre.

Proposed controls will enable:

- A larger captive resident population to service existing employment generating commercial uses for the precinct.
- Development aligned to a 'Strategic Centre' precinct with acceptable relationships between indicative built form envelopes.
- Consistency with the desired future character of North Sydney whilst maximising government infrastructure to its full potential.
- Height transition from higher-scale development to lower-scale development.

Massing diagrams (Figures 43, 44 & 45) illustrate built form height compatibility with the:

- Ward Street Precinct Plan;
- Planning Proposal to implement the *North Sydney CBD Capacity and Land Use Strategy* (November, 2016); and
- Approved Development Applications.

LEGEND

- Proposed Building
- Ward Street Precinct Buildings
- Land Use Strategy Buildings
- Approved DA Buildings

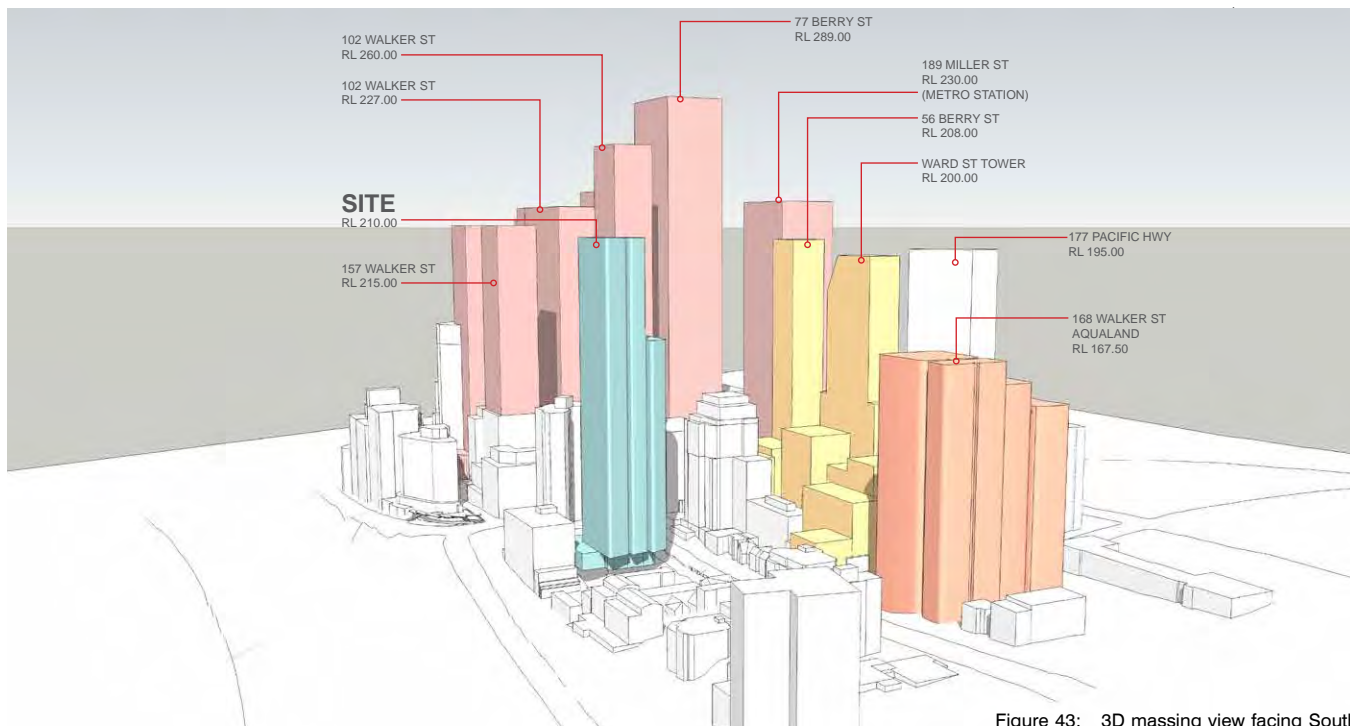


Figure 43: 3D massing view facing South

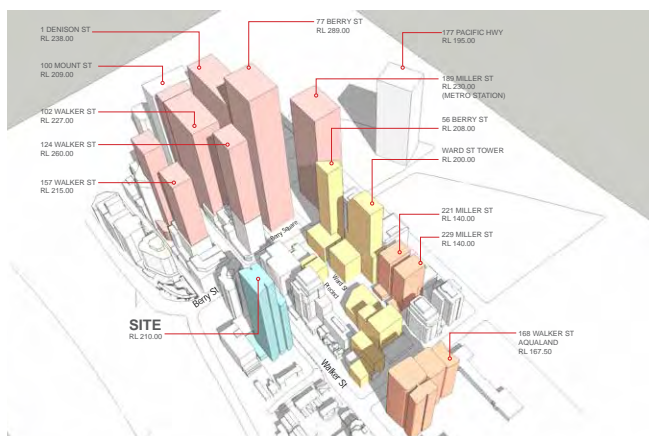


Figure 44: 3D massing view facing South



Figure 45: 3D massing view facing North

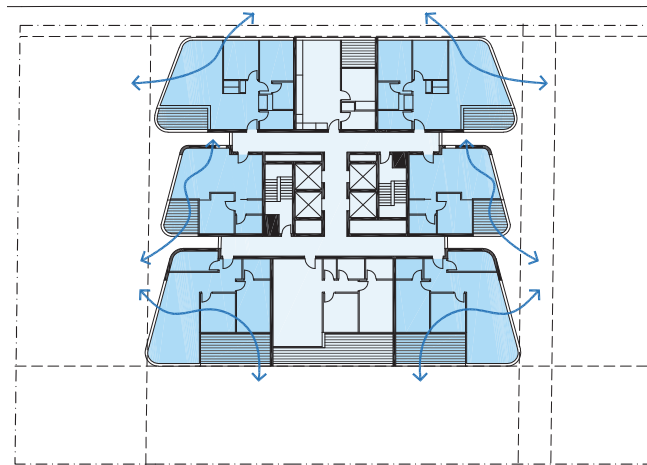
7.3 Cross Ventilation Up to 9 Storeys & Solar Access

7.3.1 Cross Ventilation

- A high level of natural cross ventilation is achieved given the primary apartment typology for development are dual-aspect with direct exposure to the prevailing winds and windows located in significantly different pressure zones.
- 75% of apartments are naturally cross ventilated in the first nine storeys, satisfying the 60% requirement as prescribed by Objective 4B-3 of the Apartment Design Guide (SEPP 65).

7.3.2 Solar Access

- The design maximises the northern aspect with only one apartment per level facing south without an eastern or western aspect.
- 87% of apartments within the building receive a minimum of 2 hours direct sunlight between 9 am and 3pm in the living rooms and private open spaces at mid winter, satisfying the 70% requirement as prescribed by Objective 4A-1 of the Apartment Design Guide (SEPP 65).
- 13% of apartments receive no direct sunlight between 9 am and 3 pm at mid winter - requirement is a maximum of 15% according to SEPP 65.



NATURAL VENTILATION - 75%

INDICATIVE NATURAL VENTILATION ANALYSIS
TO TYPICAL FLOOR PLATE



Figure 46: Cross Ventilation (Kannfinch)



SOLAR ACCESS - 87%

INDICATIVE SOLAR ACCESS ANALYSIS
TO TYPICAL FLOOR PLATE - 2HRS ON JUNE 21ST



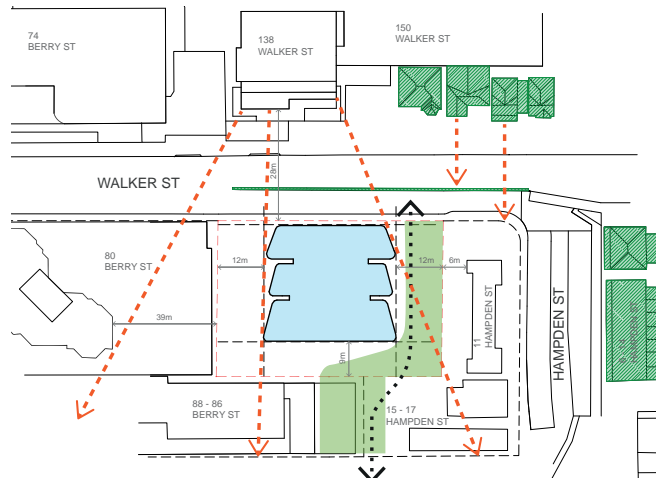
Figure 47: Solar Access (Kannfinch)

7.4 Isolation

7.4.1 Current Amalgamation - Single Tower

This Proposal addresses the key concerns with a balanced approach whereby traffic does not need to circulate down Hampden Street, proximity to heritage is respected, view sharing is increased and solar access is improved.

- Proposal is achievable based on current site consolidation & ownership;
- Increased view sharing opportunities from surrounding developments including lower levels;
- Good separation between single tower & heritage terraces;
- Single tower will result in reduced shadow impacts on the site & adjacent developments.



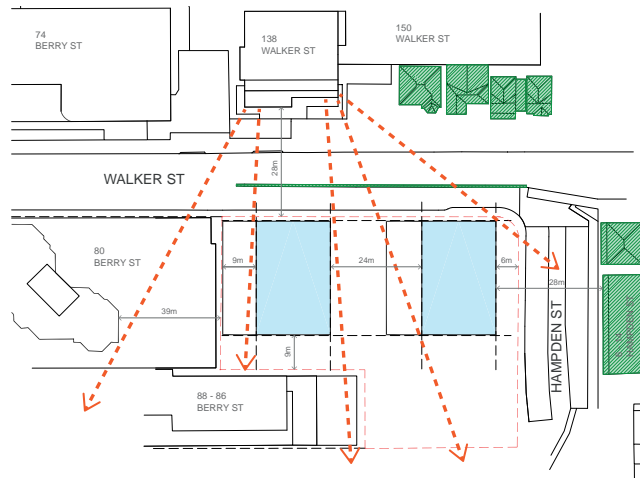
LEGEND Figure 48: Current Amalgamation (Kannfinch)

- Built Form
- Heritage Items
- ➔ View Corridors
- Potential through Site Link

7.4.2 Full Amalgamation - Two Towers

This design site analysis represents a dual tower outcome for the site as indicated in the Draft Ward Street Masterplan 2017. The opportunity site is identified as having two built forms, separated by a landscaped pedestrian through-site link.

- Relies on total site amalgamation;
- Reduced view sharing opportunities from surrounding sites;
- Tall towers in close proximity to heritage terraces;
- and
- Likely to result in significant overshadowing of site and surrounds.

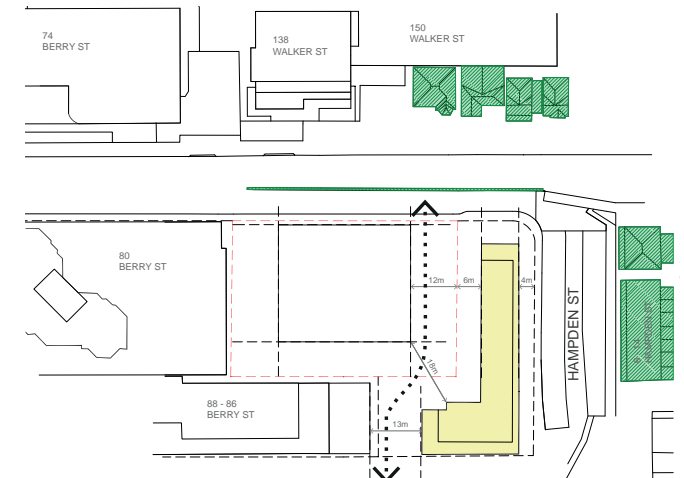


LEGEND Figure 49: Full Amalgamation (Kannfinch)

- Built Form
- Heritage Items
- ➔ View Corridors

7.4.3 Adjacent Amalgamation

- Adjacent site is not compromised in terms of future development;
- Scale of built form is consistent with adjacent site to the South;
- Scale of built form is sympathetic to heritage terraces;
- Potential to allow through site link from Walker Street is maintained;
- Proposal could enjoy dual outlook to North & South; and
- Demonstrable ability to develop two residential apartment buildings on the East Walker Street opportunity site.

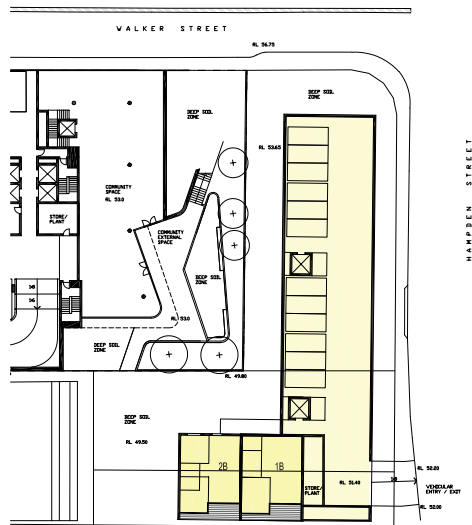


LEGEND Figure 50: Adjacent Amalgamation (Kannfinch)

- Built Form
- Heritage Items
- Potential through Site Link

7.4.4 Adjacent Site Potential Basement Floor Plan

- Proposed vehicle access to be from Hampden Street.



LEGEND Figure 51: Adjacent Basement Plan (Kannfinch)

Built Form

7.4.5 Adjacent Site Potential Ground Floor Plan

- Proposed Height of 4 & 10 storeys respecting building separation controls.
- Indicative yield of 50 apartments.



LEGEND Figure 52: Adjacent Ground Plan (Kannfinch)

Built Form

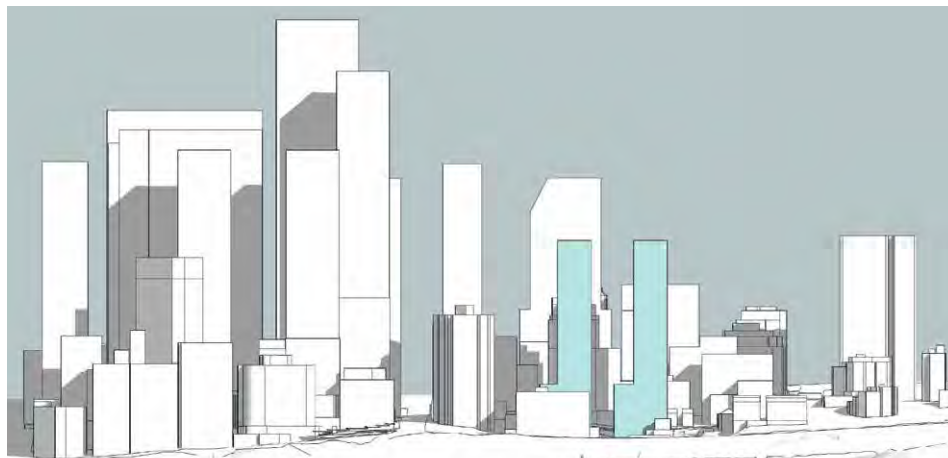
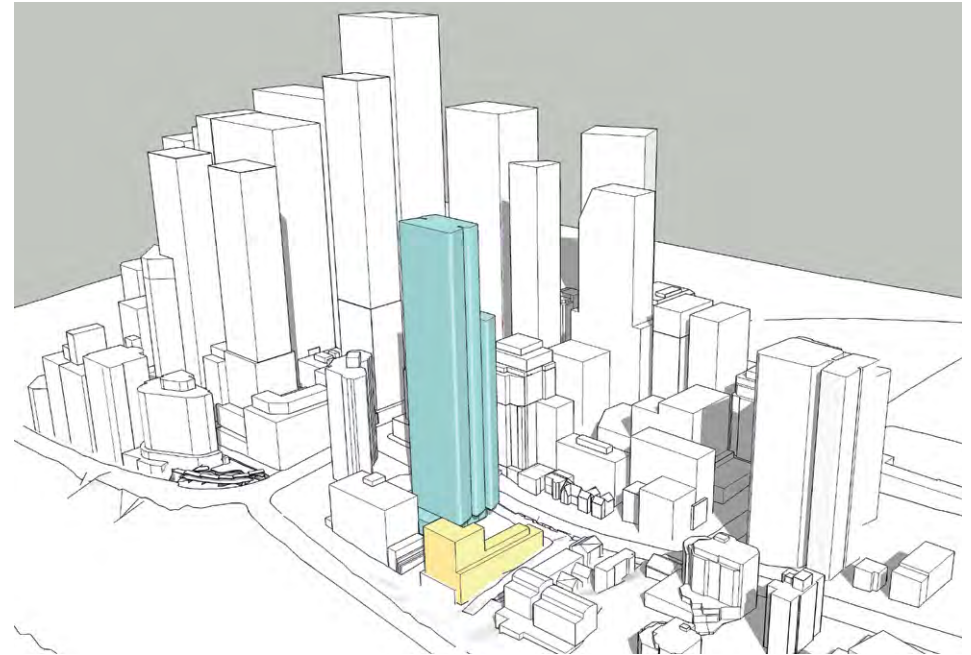
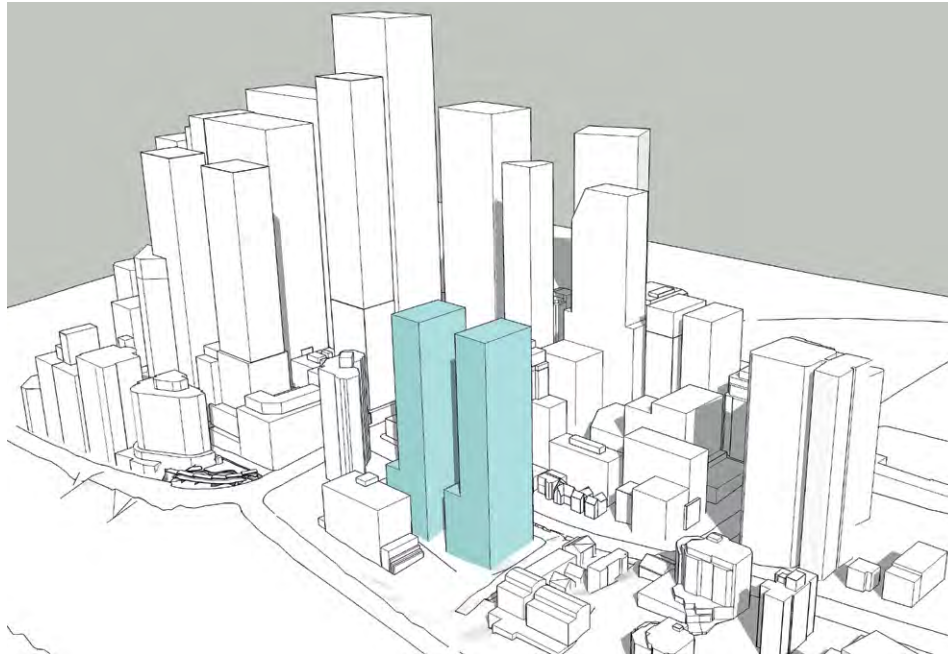


Figure 53: Full Amalgamation Eastern View (Kannfinch)

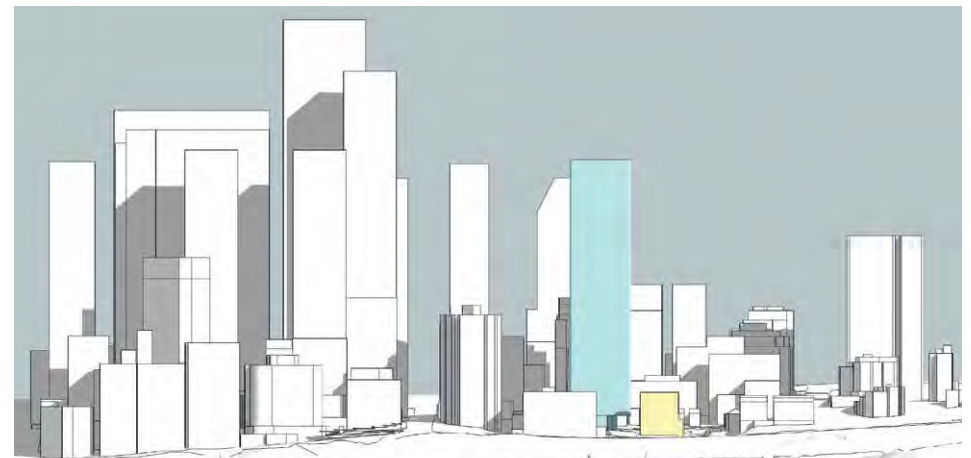


Figure 54: Current Amalgamation Eastern View (Kannfinch)

7.5 Overshadowing

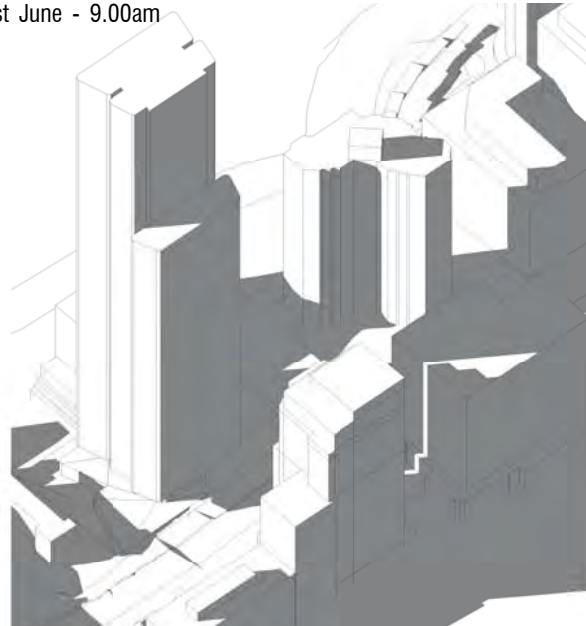
7.5.1 Adjoining Sites

The proposal has relatively minor overshadowing impacts to adjoining buildings. The adjacent property at 171 Walker Street maximises superior views of the harbour to balconies and living areas facing north-east and south-west with minimal overshadowing from the proposed development.

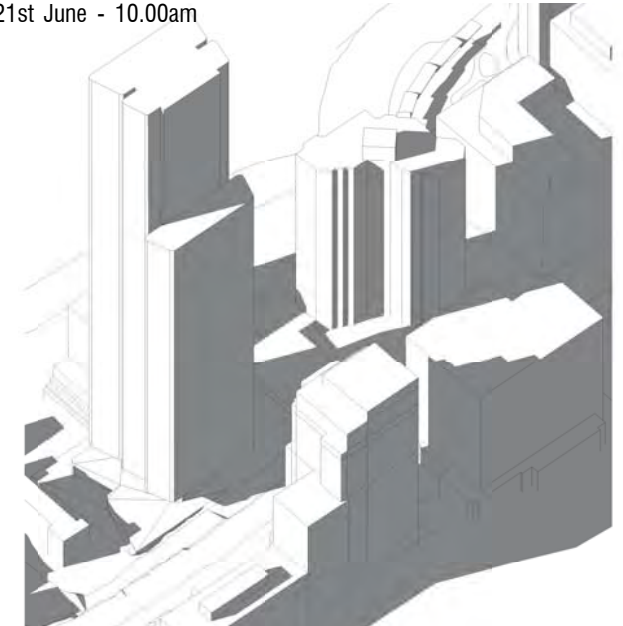
Overshadowing Analysis to 171 Walker Street:

- No overshadowing until after 9:45am.
- Minor overshadowing of Wet Areas & Secondary Bedroom Window from proposed building at 10:00am
- Majority overshadowing occurs between 11:00am and 1:00pm
- No overshadowing from 1:45pm onwards

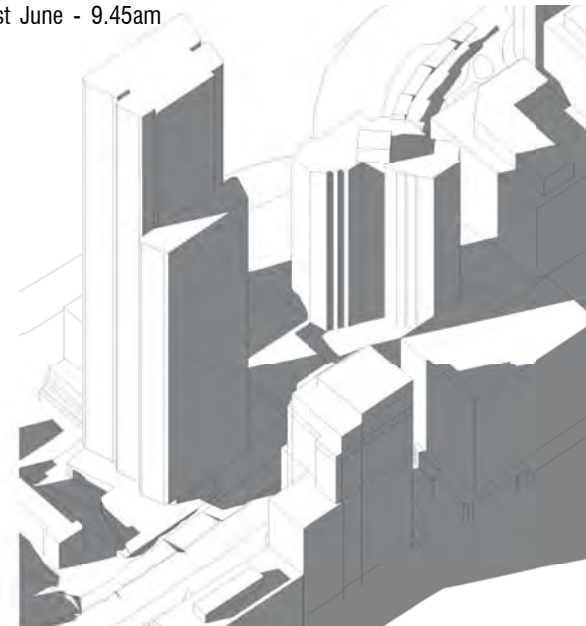
21st June - 9.00am



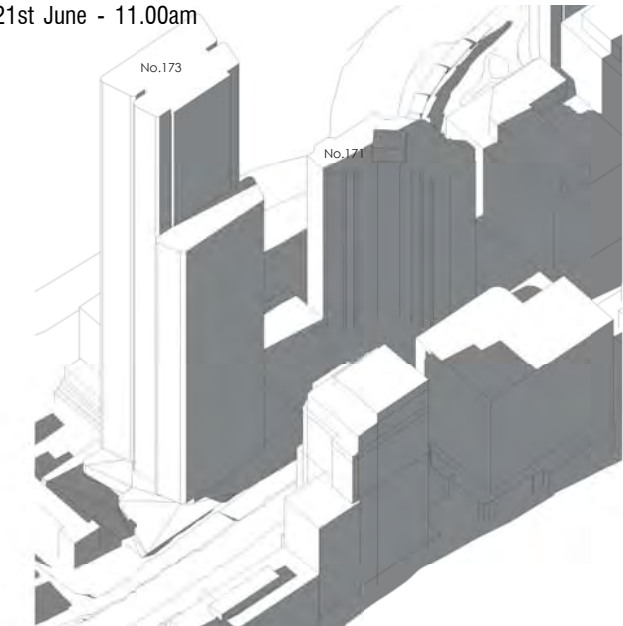
21st June - 10.00am



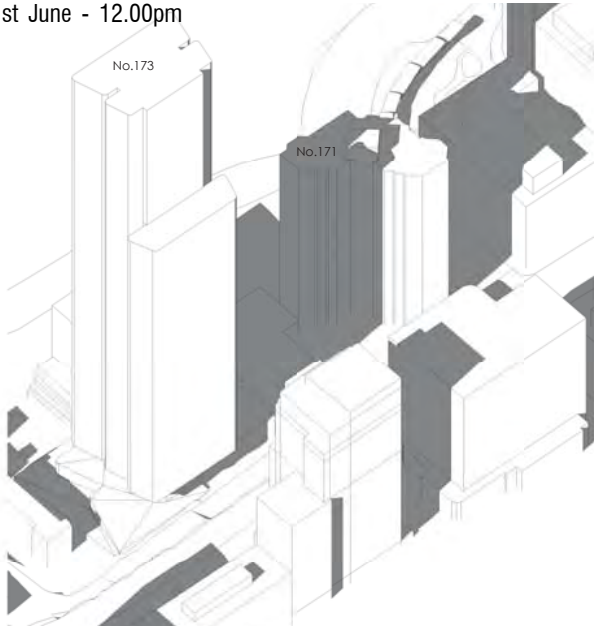
21st June - 9.45am



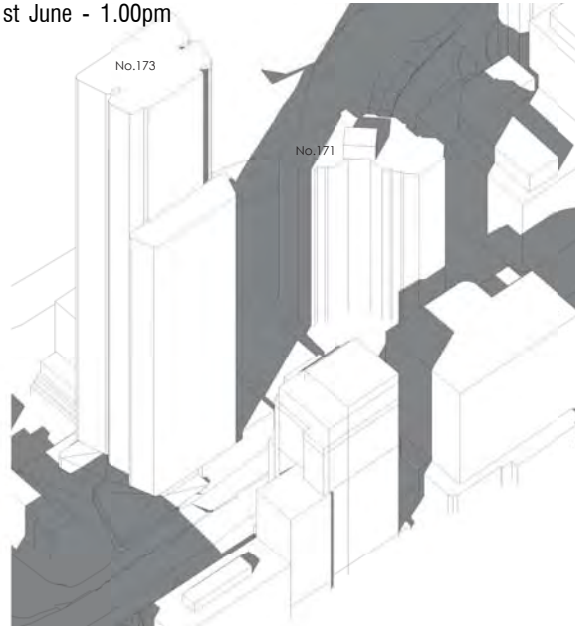
21st June - 11.00am



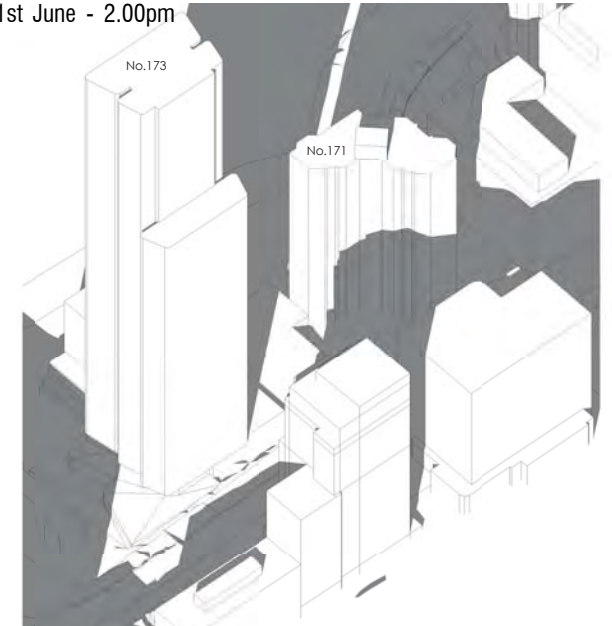
21st June - 12.00pm



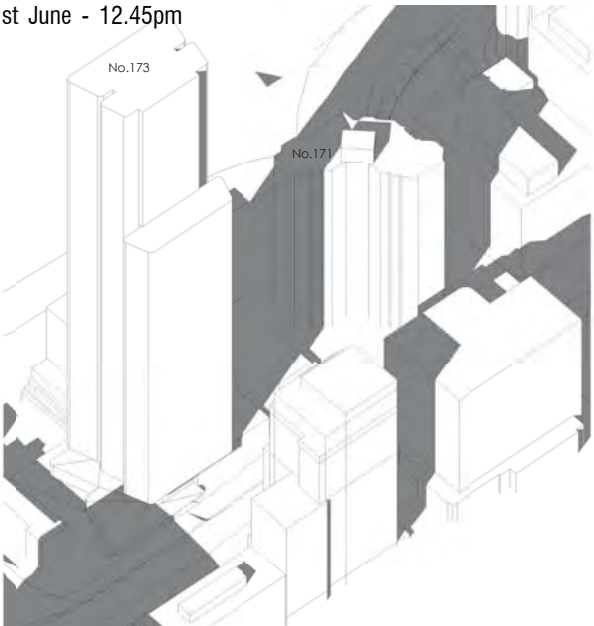
21st June - 1.00pm



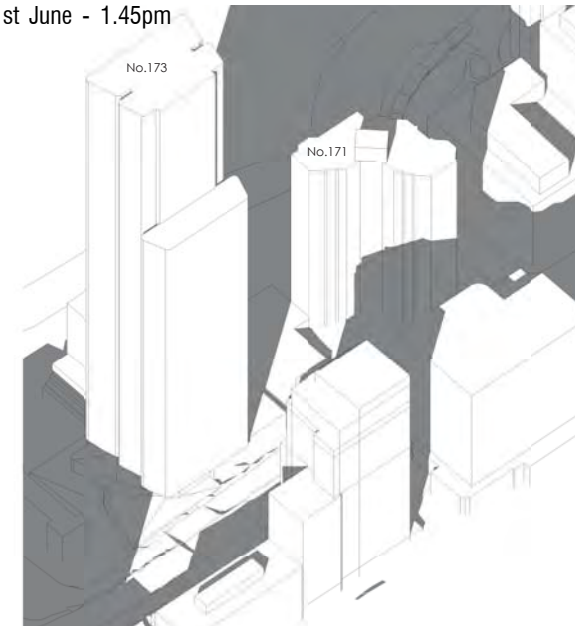
21st June - 2.00pm



21st June - 12.45pm



21st June - 1.45pm



7.5.2 Context

- Additional overshadowing impacts within North Sydney CBD are relatively minor between 10:00am and 12:00pm.
- Majority overshadowing impacts occur after 1:00pm where the additional shadow extends East past the Warringah Freeway.



21st June - 12.00pm



21st June - 2.00pm



21st June - 1.00pm



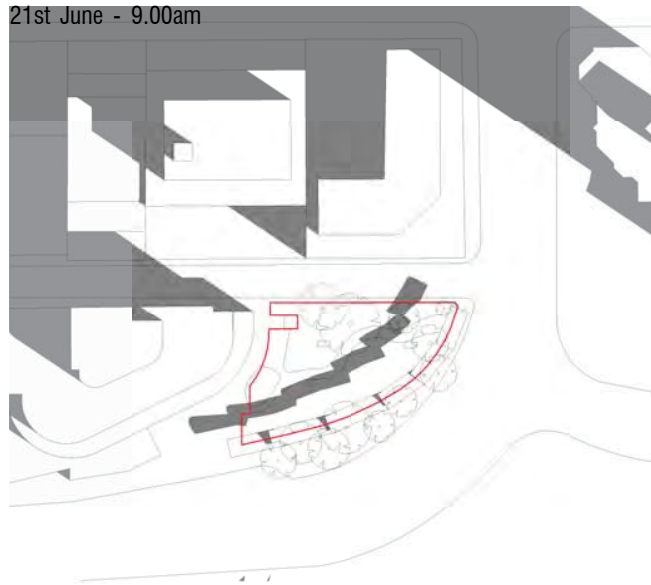
21st June - 3.00pm



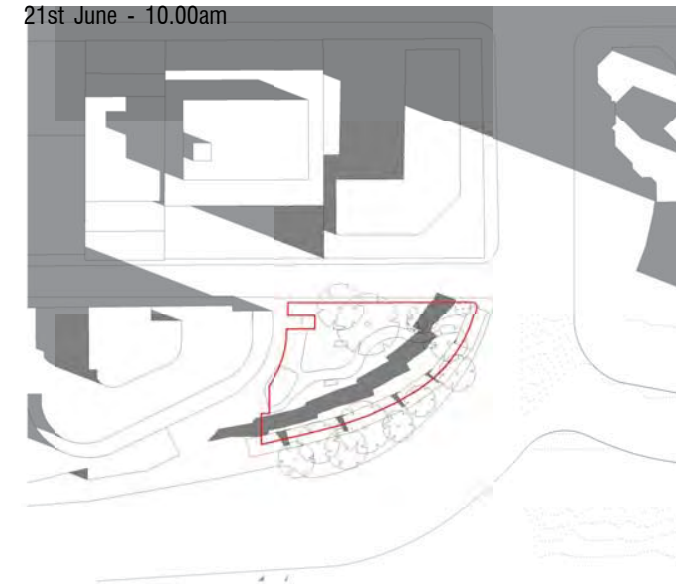
7.5.3 Doris Fitton Park

Doris Fitton Park is located on the periphery of the North Sydney CBD. At it's current state, the park receives acceptable levels of solar access between 9:00am and 12:00pm, however experiences significant overshadowing after midday from existing vegetation and the Century Plaza Building to the north.

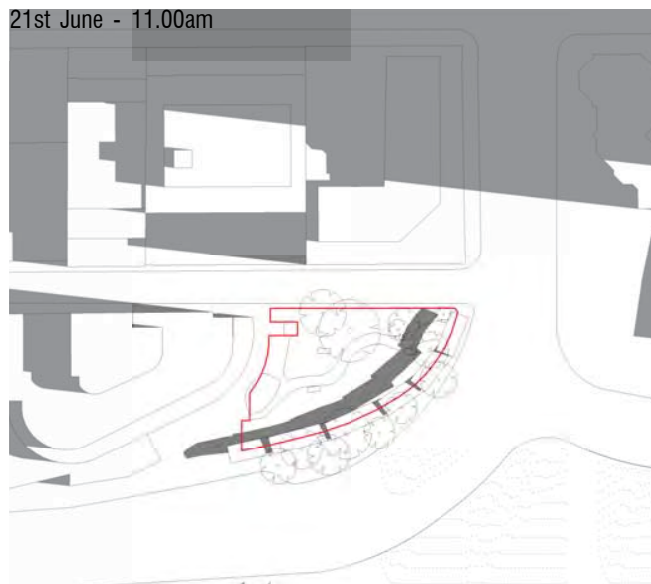
21st June - 9.00am



21st June - 10.00am



21st June - 11.00am



21st June - 12.00pm



LEGEND

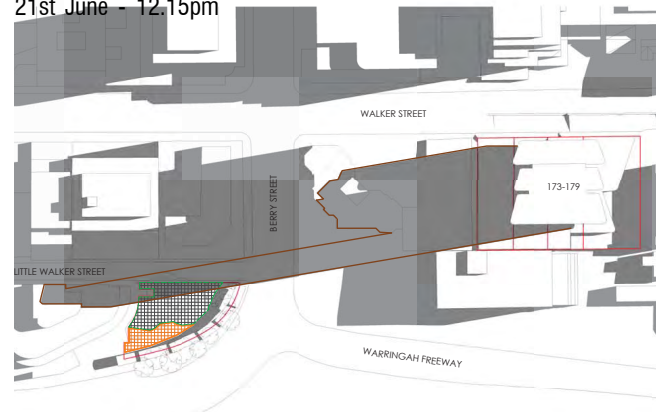
- Site & Park Boundary
- Additional Shadowing
- Approx. Area of Existing Solar Access to Park
- Approx. Area of Existing Shadowing to Park

Factoring overshadowing from existing structures and vegetation, the proposal's maximum reduction to the existing solar access to Doris Fitton park is 10%.

In the context of North Sydney CBD and proximity to the planned Victoria Cross Station, the proposal is an acceptable design outcome given the proposed park on Walker Street will facilitate new public open space to benefit of the community, notwithstanding built form designed to create 'fast moving shadow'.

There is opportunity for council to improve usability of Doris Fitton Park to maximise views to the harbour.

21st June - 12.15pm



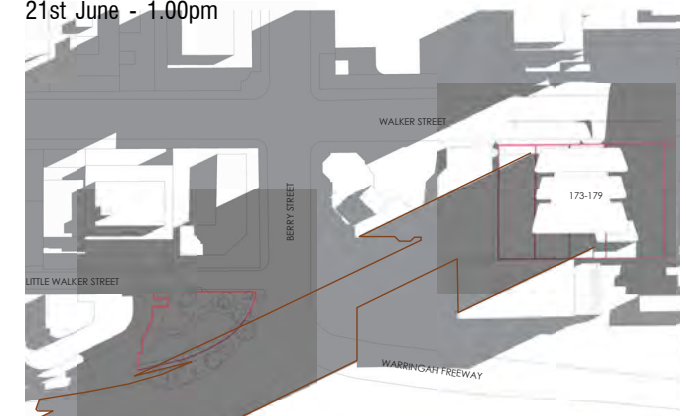
21st June - 12.45pm



21st June - 12.30pm



21st June - 1.00pm



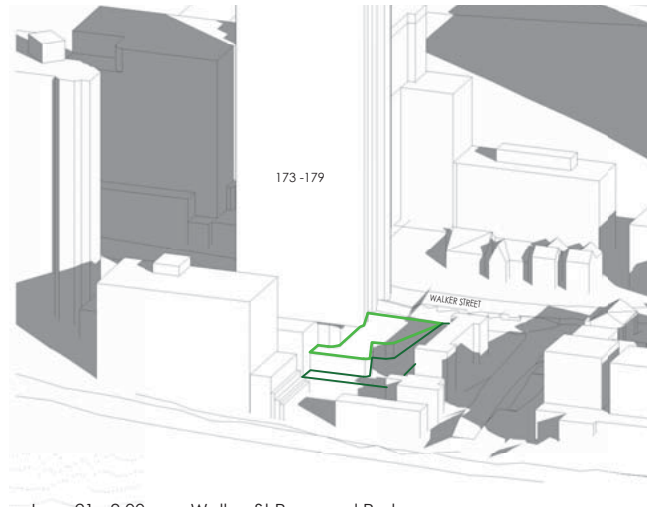
7.5.4 Proposed Park

The proposed park on Walker Street collectively achieves a high level of solar access from 9:00am to 12:30pm for both lower and upper terraces

The location of the proposed park aligns with the Ward Street Precinct Masterplan, providing a high quality public open space within the North Sydney CBD, and contributing to Sydney's green grid.

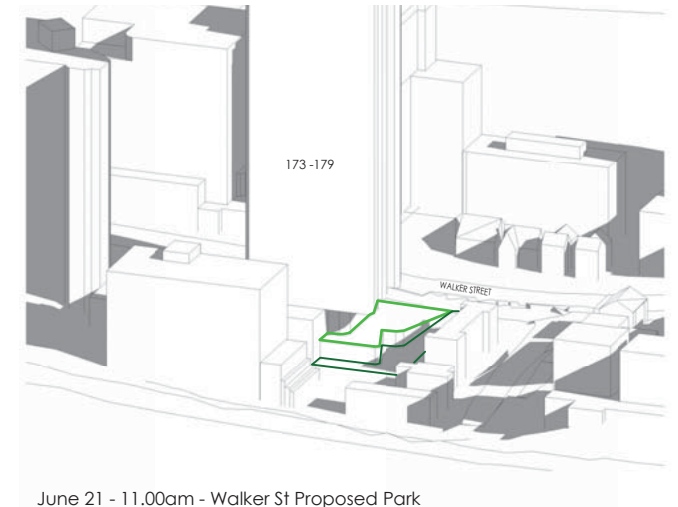
There is opportunity to:

- maximise view sharing from surrounding residential development; and
- improving pedestrian movement with future through site links to the east per the Ward Street Masterplan.



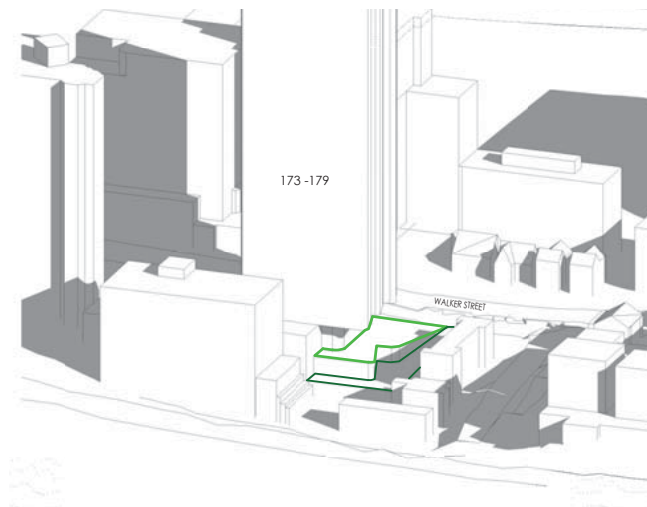
June 21 - 9.00am - Walker St Proposed Park

APPROX SOLAR ACCESS TO
UPPER TERRACE - 420 sqm (82%)



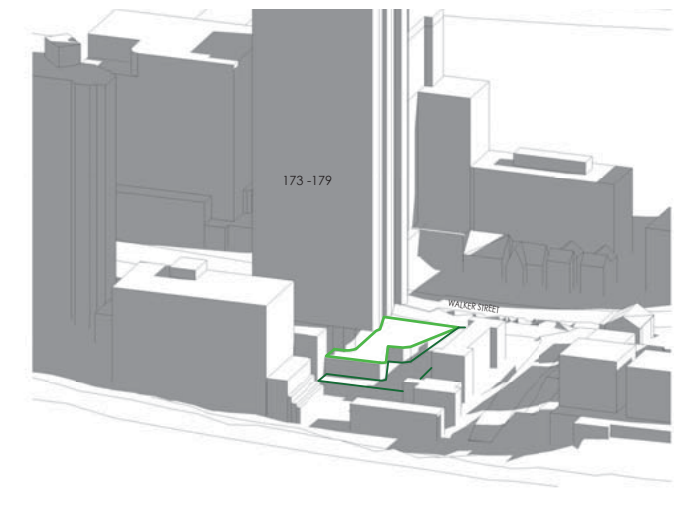
June 21 - 11.00am - Walker St Proposed Park

APPROX SOLAR ACCESS TO
UPPER TERRACE - 510 sqm (99%)



June 21 - 10.00am - Walker St Proposed Park

APPROX SOLAR ACCESS TO
UPPER TERRACE - 480 sqm (94%)

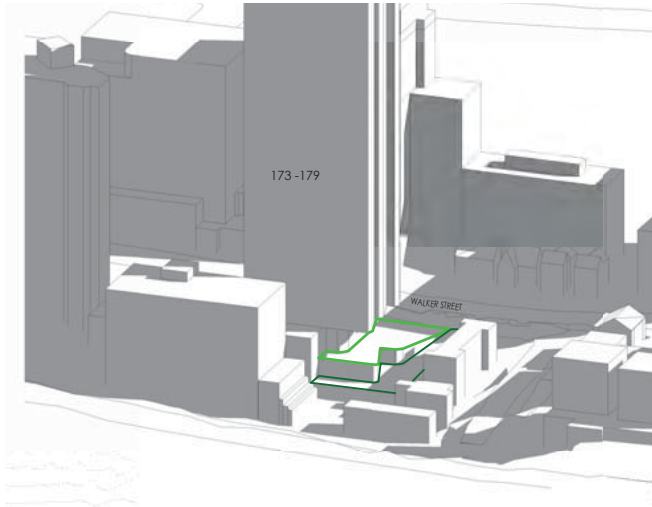


June 21 - 12.00noon - Walker St Proposed Park

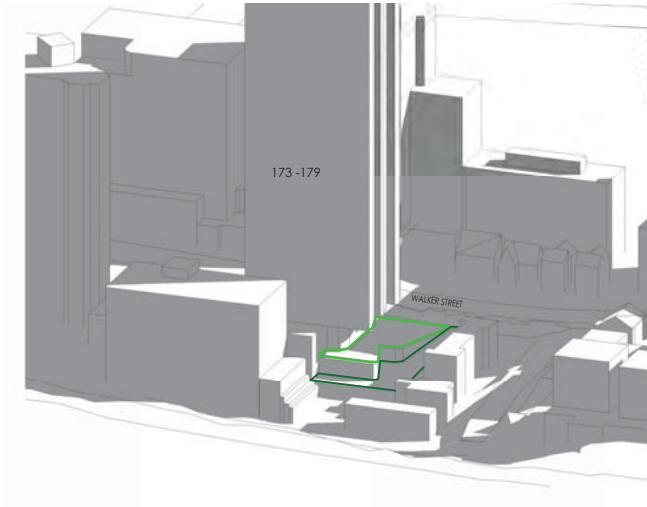
APPROX SOLAR ACCESS TO
UPPER TERRACE - 513 sqm (100%)

LEGEND

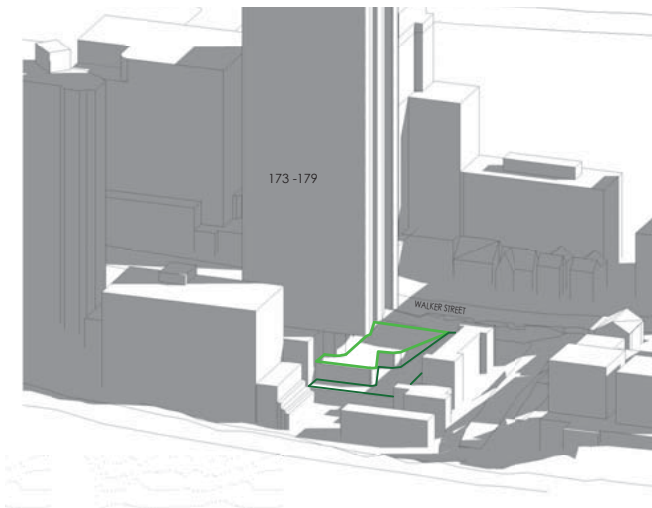
- Upper Terrace Level
- Lower Terrace Level
- Existing & Proposed Shadows



June 21 - 12.30noon - Walker St Proposed Park
APPROX SOLAR ACCESS TO
UPPER TERRACE - 416 sqm (81%)



June 21 - 1.00pm - Walker St Proposed Park
APPROX SOLAR ACCESS TO
UPPER TERRACE - 175 sqm (34%)



June 21 - 12.45noon - Walker St Proposed Park
APPROX SOLAR ACCESS TO
UPPER TERRACE - 242 sqm (44%)

8.0 Conclusions

The proposed development at the strategic site 173-179 Walker Street, North Sydney serves to create a vibrant mixed-use residential development which contributes to North Sydney as a whole.

It will offer distinct advantages, value add to the community and considerably improve the urban design and amenity of the North Sydney CBD, complementary of the NOC precinct.

Overall benefits and improvements will include:

- Contribution to the NOC precinct by providing 1515m² dedicated public open space;
- Support mixed-uses to activate the North Sydney CBD;
- Provide height transition from higher-scale development within the CBD to the lower-scale residential uses of North Sydney;
- Meeting future housing targets prescribed by the Draft North District Plan;
- Contribute to Sydney's green grid by integrating publicly accessible pedestrian links, enhancing the overall pedestrian experience.;
- Exhibit contemporary best practice through urban renewal; and
- Maximise government investment into planned infrastructure of the Sydney Metro Rail Project.

The proposal aligns with strategic intent for North Sydney:

- Draft North District Plan (GSC 2016)
 - Contributes to a 30 minute city, responding to job and housing targets for North Sydney with the provision of 43 jobs and 284 apartments; and
 - Enhancing the public domain by providing public open space that will form a network of pedestrian links existing and proposed to improve the pedestrian experience within North Sydney.
- Sydney Metro Rail Project
 - Maximise government investment to planned infrastructure, given the site's proximity to the planned Victoria Cross Metro Station of (under 5 minute) walking distance, achieving the greatest heights and densities; and
 - Contribute to the 'combined origin-destination' vision for Sydney Metro Stations.
- North Sydney CBD Capacity and Land Use Strategy (November 2016)
 - Heights compatible with indicative heights identified in the study;
 - Enable height transitions from North Sydney CBD.

From an urban design perspective, we consider that the proposal responds appropriately to the unique characteristics of the site and its context within the North Sydney CBD.

The proposal will deliver distinctive development with a single slender tower built form, which will enhance the sense of place and activate the periphery of North Sydney CBD whilst maximising view sharing to the harbour and remaining in harmony with the heritage significance of the area.

Accordingly, the proposal is supported on urban design merit and is recommended for approval.

Contribute to the NOC precinct by facilitating a safe, attract, high quality community space.

Deliver a distinctive single slender tower built form that respects height transition and over shadowing while aiming to contribute in meeting future housing targets.

Contributing to the NOC precinct by assisting in increasing place capital in North Sydney by providing a collaborative community hub and public domain.

Contributing to the NOC precinct by providing 1515m² dedicated public open space.

Enhancing the public domain by providing public open space that will form a network.



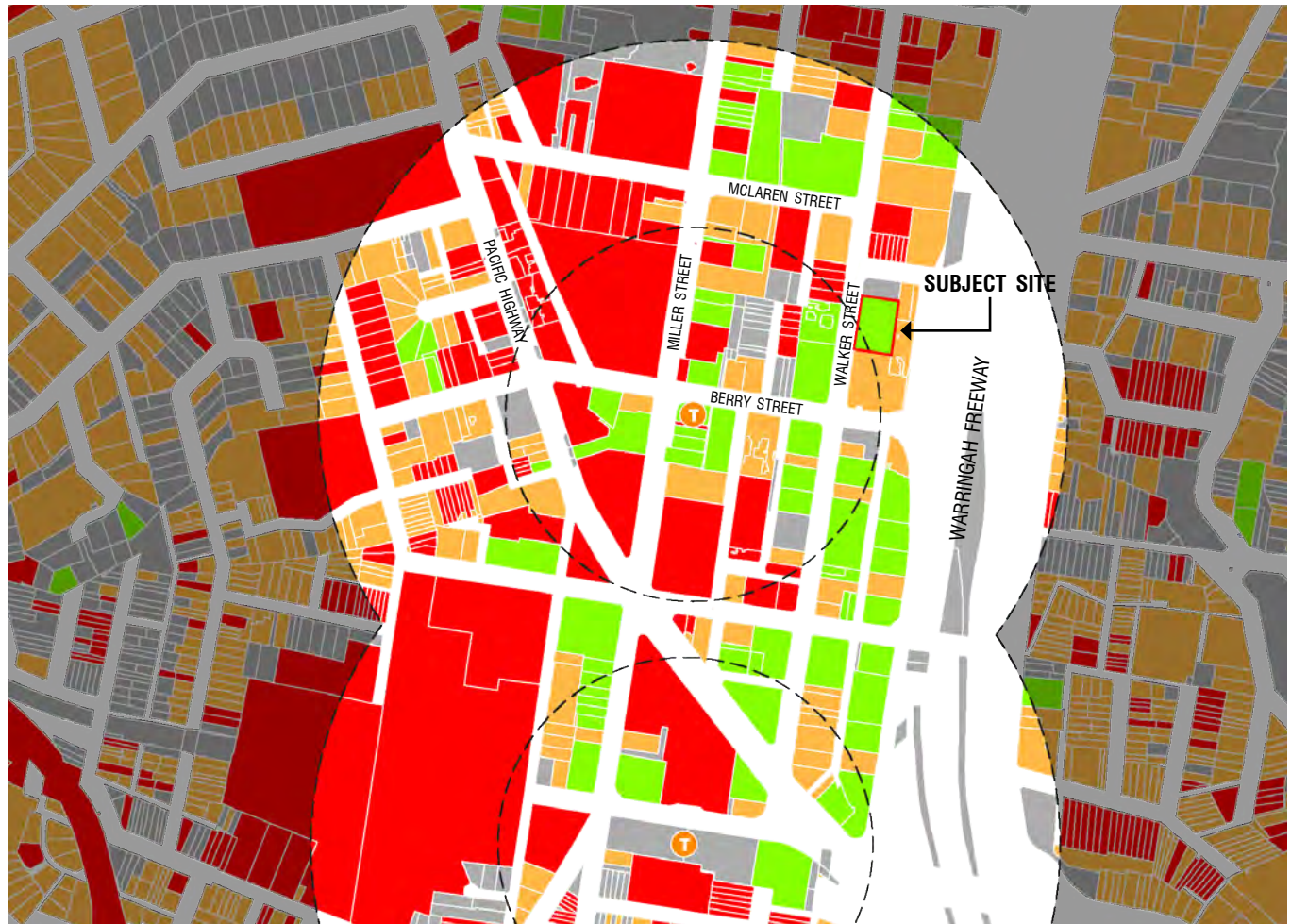
9.2.6 Lots to Change

Susceptibility to Change analysis involves the investigation of:

- Heritage Items;
- Ownership patterns;
- Planning Proposals and Development Applications;
- Building age; and
- Lot configuration and dimensions.

Allotments considered Susceptible to Change are those that:

- Do not have heritage listing;
- Not in Strata Title Ownership, with the expectation of those sites where at least 75% of units are in single ownership (as in the case of the subject site);
- Form part of blocks with complex ownership pattern;
- Have a Development Application or Planning Proposal approval or currently under assessment;
- Are ageing;
- Have a lot width greater than 24 metres and a depth greater than 33 metres; and
- Preferably corner allotments.



LEGEND

- | | | | |
|--|---------------------------|---|------------------|
| | Subject Site | | Likely to Change |
| T | Train Station | | |
| | Highly Unlikely to Change | | |
| | Unlikely to Change | | |

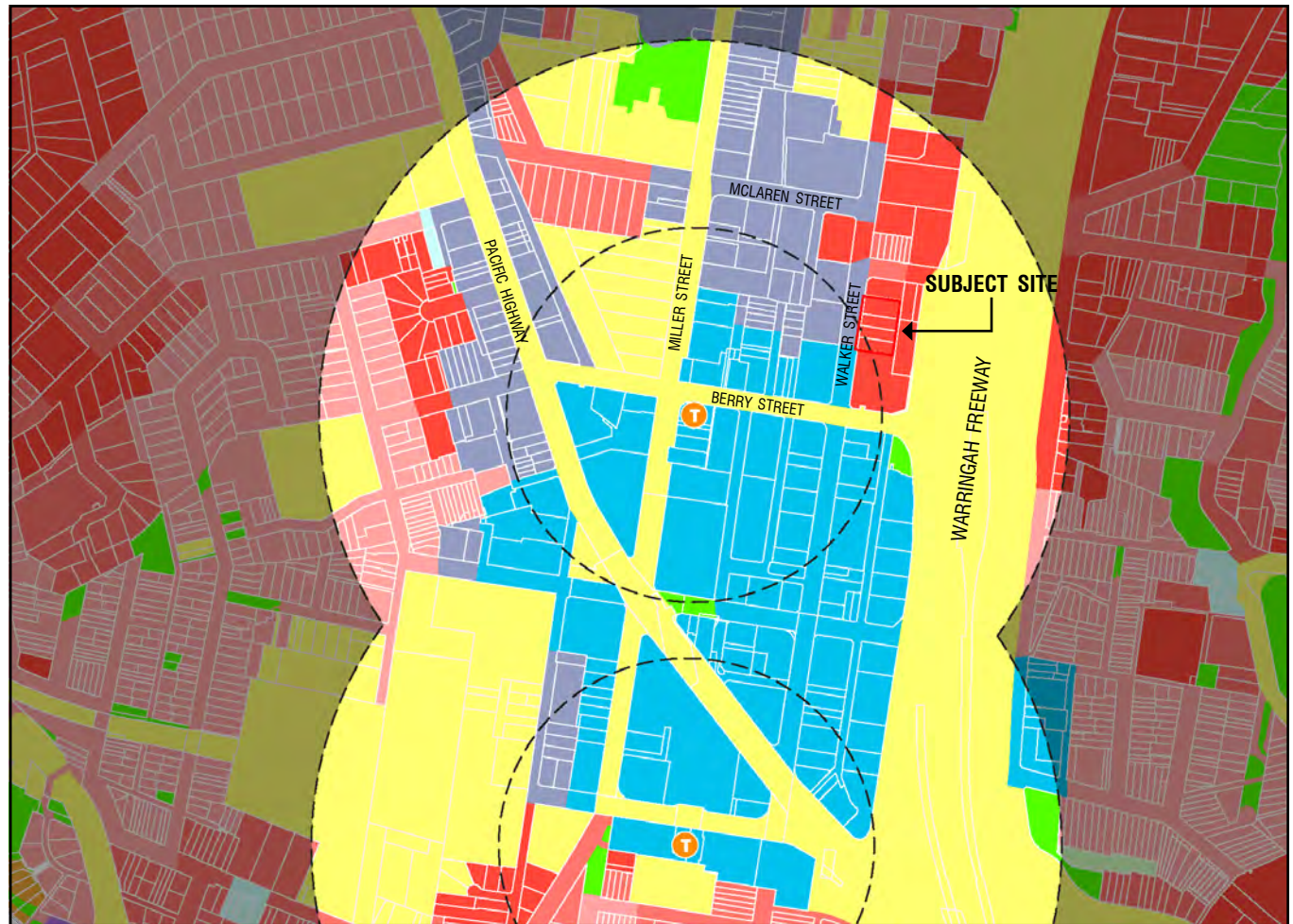
Figure 55: Lots to Change



9.0 Appendix

9.1 Planning Context

LGA:	North Sydney Council
EPI:	North Sydney LEP 2013
Current Zoning:	R4 High Density Residential
Current Building Height:	12 m
Heritage	Not heritage listed or in a conservation area.



LEGEND

	Subject Site		R4 - High Density Residential
T	Train Station		R3 - Medium Density Residential
	B3 - Commercial Core		R2 - Low Density Residential
	B4 - Mixed Use		SP2 - Infrastructure
			RE1 - Public Recreation

Figure 56: Land Use Plan



9.2 Susceptibility to Change

9.2.1 Development Activity

There is limited capacity for lateral expansion within North Sydney Centre given constraints defined by controls in relevant environmental planning instruments including:

- *solar access to special areas;*
- *existing residential development;*
- *minimum site area requirements; and*
- *development yield.*

The site has been identified in the North Sydney Council *Capacity and Land Use Study* (November, 2016) as an opportunity site for lateral expansion given its proximity to the planned Victoria Cross Metro Station. Key considerations for redevelopment would involve:

- *Value of and impact on heritage conservation;*
- *existing view corridors to Sydney harbour;*
- *Topography and access; and*
- *Commercial uses within a podium.*

(CLUS 2016)



LEGEND

- Subject Site
- T Train Station
- Development Applications Approved
- Develop Applications Under Assessment

Figure 57: Development Activity



9.2.2 Heritage

The site is within immediate vicinity of several heritage items and heritage conservation areas (illustrated to the right).

It is important to note some buildings identified having heritage significance present potential for redevelopment, the likelihood remains less.



LEGEND

- Subject Site
- T Train Station
- Local Heritage Items
- Local Heritage Conservation

Figure 58: Heritage Plan N

9.2.3 Ownership Patterns

A significant portion of properties within the locality are in Strata Title Ownership.

“Strata dwellings provide a more affordable option for residents and key workers within the LGA”

(Economic Impact Assessment prepared by Hill PDA Consulting)

Table 8.2.3. Median sale price (\$'000) in December

	2010	2016	Growth (\$)	Growth (%)
North Sydney LGA (non-strata)	1,320	2,510	1,190	90%
North Sydney LGA (strata)	633	1,100	467	74%
Greater Sydney (non-strata)	600	955	355	59%
Greater Sydney (strata)	490	729	239	49%

(EIA prepared by Hill PDA Consulting, September 2017)

Unless 75% of allotments within a Strata Title have single ownership, the land is considered unlikely to undergo transition.



LEGEND

- Subject Site
- T Train Station
- Amalgamated Ownership
- Single Ownership
- Strata Title Ownership

Figure 59: Ownership Patterns N

9.2.4 Built Form Age

Existing design controls within the North Sydney Centre make adaption into the existing built form difficult.

As a rule of thumb we are of the opinion that recent development (being less than 7 years old) is unlikely to undergo transition.

A review of recent built form outcomes and future development opportunities will require assessment against current DCP controls within an amended planning regime.



LEGEND

- Subject Site
- T Train Station
- Buildings Under 8 Years of Age
- Buildings Older than 8 Years of Age

Figure 60: Built Form Age N

9.2.5 Desirable Lots to Develop

A significant contributing factor to a site being considered “susceptible to change” is it having sufficient lot frontage and depth to accommodate:

- At ground floor level:
 - Vehicular access and loading compliant with Australian Standards;
 - Residential and commercial entry;
 - Servicing; and
 - Retail premises.
- At basement level: conventional parking (i.e.. not in a stacked configuration) with spaces and aisle widths compliant with Australian Standards.

It is considered that the minimum lot frontage and depth to accommodate the above is:

- Frontage: 24 metres
- Depth: 30 metres



LEGEND

- Subject Site
- T Train Station
- Desirable Lots to Develop

Figure 61: Desirable Lots to Develop



