

PLANNING PROPOSAL FOR 245 MARION STREET, LEICHHARDT, NSW

CONCEPT DESIGN REPORT



REDEVELOPMENT OF 245 MARION STREET, LEICHHARDT, NSW

CONCEPT DESIGN REPORT

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EXECUTIVE SUMMARY

245 Marion Street is an isolated industrial site located next to Marion light rail station, a station along the Inner West light rail network.

The Planning Proposal is for the redevelopment of the industrial site that will:

- Improve the existing fabric by revitalising the location.
- Retain employment and provide residential uses.
- Improve public amenity, accessibility and facilities around the light rail node.

Proposed Concept Design

The Concept Design proposes a development with:

- A built form that comprises:
 - 3 storey podium – with setbacks from the surrounding Marion Street and Walter Street, and scale of podium built form consistent with adjacent buildings.
 - 5 storey “tower” buildings above podium level – with greater setbacks at upper levels from surrounding streets to minimise the scale of the development fronting the lower density residential neighbourhood.
- Landscaped terraces at podium roofs (Levels 2 and 4) and tower roof (Level 9) – to be used as open spaces.
- Basement levels for car parking and urban services.
- Ground Level with active frontages of retail, commercial or urban services to Marion Street and the internal/ site laneway.
- An urban form that is consistent with the form of historical industrial developments adjacent to the rail corridor.
- Setbacks from adjacent buildings to comply with SEPP 65’s *Apartment Design Guide* for optimum residential amenity to the development and adjacent properties.
- Residential amenity that complies with the *Apartment Design Guide*.

Design Criteria for Quality Design

The Concept Design prepared to support the Planning Proposal illustrates a design that meets the key design criteria for quality design to deliver:

- A landmark/ gateway development, architecturally attractive to highlight this transport mode.
- Quality and energy efficient design.
- High building standards.
- Noise attenuation between employment (urban services) and residential uses.
- Minimal visual impacts.
- Access to open space.
- Connectivity to its surrounding neighbourhood.
- Urban design measures that respect and contribute to its existing streetscape future neighbourhood character, local heritage and environmental constraints.
- Public domain benefits and improvements to the precinct around the future Marion light rail station.
- A legible and permeable public domain at street level that connects to the surrounding neighbourhood and the light rail transport node.
- An attractive and engaging public domain with high pedestrian amenity of quality spaces, landscape features, universal accessible and sheltered pathways and safety in design.
- Landscaped communal open spaces at upper levels (podium and tower roofs) to deliver quality public amenity to its residents.

A transit-oriented development

Redevelopment of the site provides the opportunity for a transit-oriented development that can offer an array of benefits from lifestyle, economic and environmental, to:

- Provide a mixed-use development close to public transport and local and regional services.
- Reduce dependency on driving.
- Optimise the locational benefits of the site’s walkable distance to public transport of light rail and bus routes, cycleway and pedestrian walkways to Sydney CBD.
- Better utilise an isolated industrial site whilst retaining its existing urban services, augmented by new retail, commercial and residential uses, optimising on its locational attributes/ benefits.
- Provide a variety of housing topologies for differing family structures of singles, families, empty-nesters and seniors.
- Maximise development potential of the site’s proximity to public transport routes.
- Provide environmental benefits of:
 - Less reliance on private car use for the daily commute.
 - Increase public transport usage.
 - Reduce household spending on transportation.
 - Reduce vehicular transportation cost, congestion and resultant air pollution.
- Enhance the overall economic efficiency of a city.

Delivering on the *Greater Sydney Region Plan: A Metropolis of Three Cities*

Redevelopment of the site will offer a development that addresses the directions and objectives of the *Greater Sydney Region Plan* that:

- Increases housing supply.
- Provides housing choice and housing mix to cater for the changing needs, households and age groups.
- Enables diverse and affordable housing.
- Delivers integrated land use and transport.
- Retains and manages industrial and urban services.
- Increases tree canopy within the site, currently devoid of tree cover.
- Creates an ecologically sustainable development.
- Contributes to a 30 minute city with optimising development in the right place, with ease of access to the Sydney CBD, local services, recreational areas and international transport.

1.0 INTRODUCTION

1.1 Description of the Planning Proposal

The industrial site at 245 Marion Street, Leichhardt is seeking a Planning Proposal for the redevelopment of the site as a mixed-use, transit-oriented development for urban services, commercial, retail and residential uses.

The site is located adjacent to the Marion light rail station and within 400m from Leichhardt Market Place.

The site and its premises are used as:

- An automotive repair facility – fronting and accessed from Marion Street.
- Architectural design office – fronting and accessed from Walter Street.

The site is within the Inner West Council local government area. The site is zoned IN2 Light Industrial under *Leichhardt Local Environmental Plan 2013*, with:

- Maximum permissible density/ floor space ratio (FSR) of 1:1.
- No height controls.

The Planning Proposal seeks to introduce a site-specific LEP clause to accommodate the following, of:

- Maximum permissible FSR of 3:1 comprising:
 - Urban services, commercial and retail uses of minimum FSR 1:1.
 - Maximum residential FSR of 2:1.
- Maximum permissible height of 8 storeys comprising:
 - 8 habitable floors (Levels 1-8).
 - Roof garden.

1.2 The Report

This report provides an architectural description and an urban design evaluation of the Concept Design. The report has been prepared by Audrey Thomas (B.Sc.(Arch), B.Arch.(Hons1,) Grad Dip Urban Design, M Urban & Regional Planning) Of AT Architecture, Planning + Urban Design.

2.0 THE SITE

2.1 Address and Legal Title

The site is 245 Marion Street, Leichhardt, NSW.

The site's legal description is Lot 1, DP 507525.

2.2 Location

The site is located within the Inner West local government area.

The site is located within Sydney's Inner West and is approximately 7km west of the Sydney Central Business District (CBD). (Figure 2.1: Location Map)

The site is bounded:

- to the south by Marion Street.
- to the north by Walter Street.
- to the east by an aged care facility – The Marion.
- to the west by the Inner West light rail corridor and the Marion light rail station.

The site has frontages to both Marion Street and Walter Street. (Figure 2.2: Context Aerial)

Figure 2.3: View of Site from Marion Street

Figure 2.4: View of Site from Walter Street

2.3 Site Description

The site is rectangular with allotment dimensions of:

- 40.235m at Marion Street (southern boundary).
- 35.04m at Walter Street (northern boundary).
- 137.21m at its eastern boundary.
- 137.3m at its western boundary.

2.4 Site Area

The site has an area of approximately 5,210.48m².

2.5 Existing Land Use and Buildings

The land and its buildings are currently used for industrial and business purposes with:

- The building fronting Marion Street as a motor vehicle service centre for Leichhardt Alfa Romeo; and
- The building fronting Walter Street as a professional design consultancy.

The site currently has a single storey industrial building of masonry construction and a combination of saw-tooth, pitched and flat metal roofs. The building extends from Marion Street to Walter Street.

Existing distribution of uses, their relative areas and densities comprise:

| | Building area | FSR |
|---|----------------------------|-----------------|
| Automotive service centre | 2,855 m ² | 0.55 : 1 |
| Professional offices – design consultancy | 690 m ² | 0.13 : 1 |
| Total: | 3,545 m² | 0.68 : 1 |

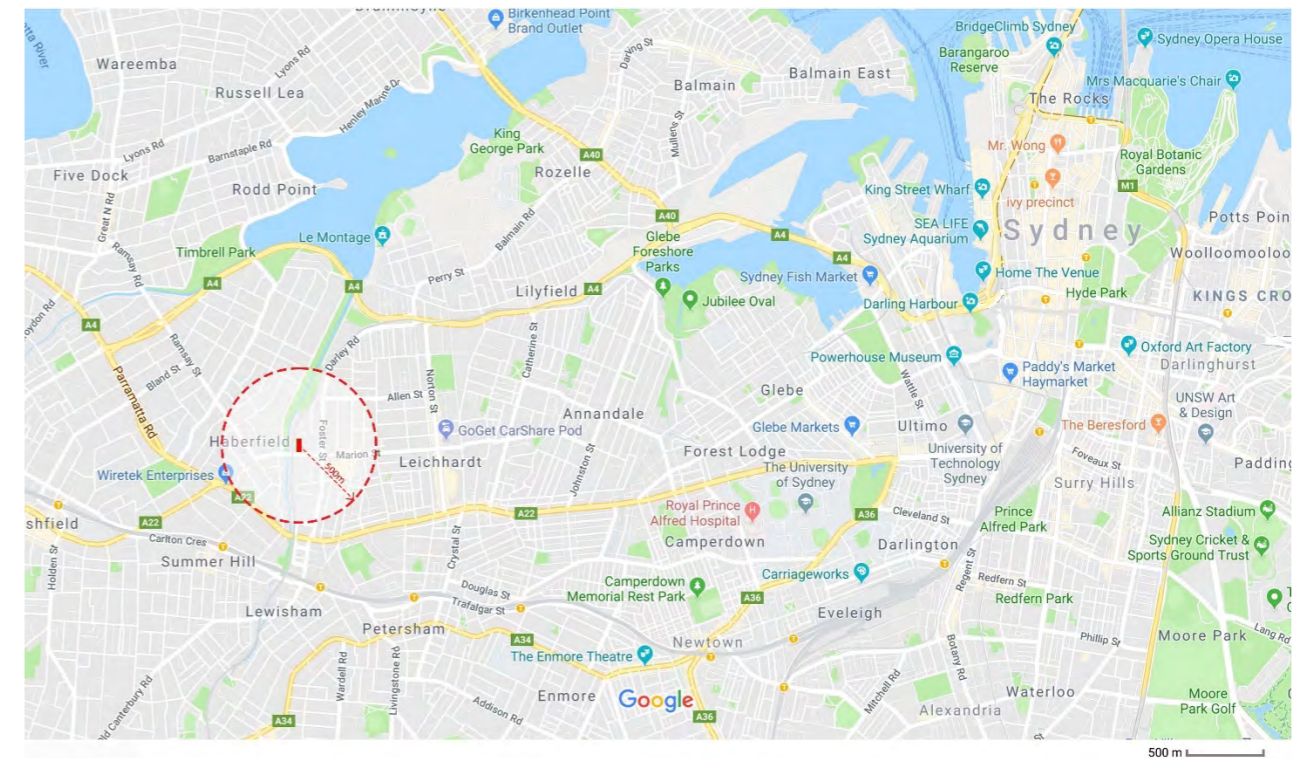


Figure 2.1: Location Map (source: Google Maps)



Figure 2.2: Context Aerial (source: Six Maps)

2.6 Site Access and Parking

The site has frontage to both Marion Street (south) and Walter Street (north), with access to both streets.

Vehicular access to the:

- Car servicing centre is from Marion Street and Walter Street, with on-site parking front and rear.
- Design consultancy is from Walter Street, via a driveway to on-site parking at the north-western portion of the site.

2.7 Infrastructure – Utility Services

The site has utility services of electricity, gas, sewerage, water supply, drainage and telecommunications.

The capacity of the existing services infrastructure to service the proposed development will be investigated at a future Development Application Stage.

2.8 Flood Considerations

The site is affected by the 1:100 year flood events for a small portion of the site, at its boundaries to Marion and Walter Streets. The site is also affected by Probable Maximum Flood (PMF) levels.

A Council stormwater drain is located at the western end of Walter Street.

2.9 Environmental Considerations

There is no critical habitat or threatened species, populations or ecological communities, or their habitats, on or around the subject land, or that will be significantly affected by the proposed development.

2.10 Historical Development of the Site

The site of 245 Marion Street and the adjacent site of 237 Marion Street historically comprised large subdivisions, used for industrial purposes as these sites were strategically located along the goods rail line that ran between Darling Island to Dulwich Hill. These sites were located within the historically small scale, fine-grained subdivision pattern of residential areas of West Leichhardt.

Historical chronology of the development of the subject site at 245 Marion Street and the adjoining site to the east, at 237 Marion Street, illustrates the development of large scale buildings on these sites as follows:

c. 1930:

- The sites were large undeveloped parcels of land located among a development pattern of smaller lot subdivisions.
- The goods rail line, on the western side of the site, had been constructed.
- Streets surrounding the sites were formed, including Hawthorne Street which terminated at the eastern boundary of 237 Marion Street.
- A small industrial building has been constructed on the large site south of Lambert Park fronting Lords Road and adjacent to the rail line.

Figure 2.5: Site Aerial – c.1930

c. 1942:

- The site at 245 Marion Street remains undeveloped with a 1-2 storey industrial building erected on No. 237.
- Lambert Park and the adjoining open space to the east have been laid out as parkland.

Figure 2.6: Site Aerial – c. 1942



Figure 2.3: View of Site from Marion Street
(source: A.Thomas)



Figure 2.4: View of Site from Walter Street
(source: A.Thomas)



Figure 2.5a: Site Aerial – c.1930
Historical Aerials (source: DFSI Spatial Services)



Figure 2.5b: Site Aerial – c.1942

c.1961:

- By 1961, the current single storey industrial development with a saw-toothed roof had been constructed on 245 Marion Street. Parking is located within the front setback area at Marion Street with a rear parking area accessed from Walter Street.
- Additions to the building at 237 Marion Street extended to most of the site, with vehicular access from Hawthorne Street.

Figure 2.5c: Site Aerial – c. 1961

1984 – 2019 (present):

- The site at 237 Marion Street was redeveloped from industrial premises to an aged care facility. The site remains zoned for industrial purposes.
- The industrial development at 245 Marion Street received small additions to the rear.

Figure 2.5d: Site Aerial – 2019



Figure 2.5c: Site Aerial – c.1961
Historical Aerials (source: DFSI Spatial Services)

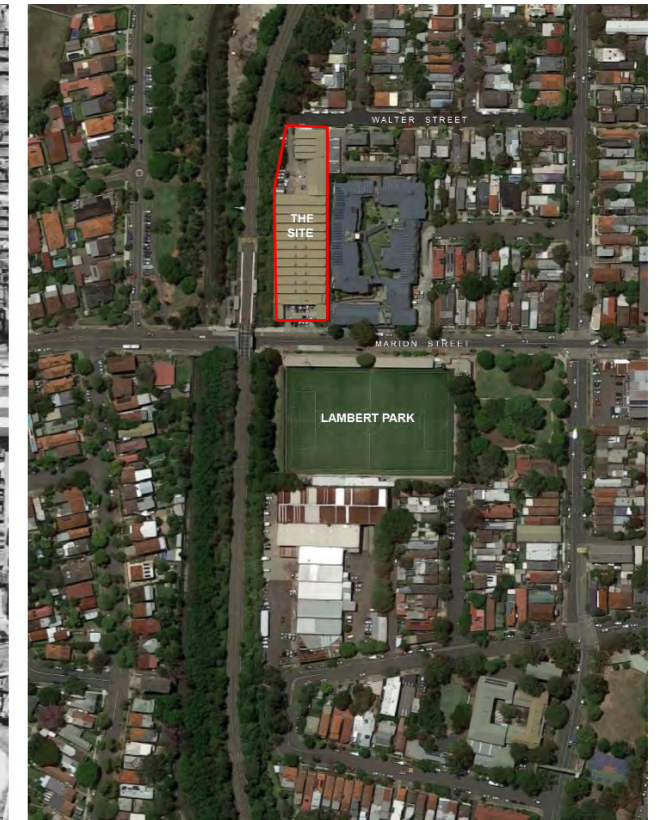


Figure 2.5d: Site Aerial – 2019

3.0 EXISTING PLANNING FRAMEWORK

3.1 Land Use Zoning and Development Density

The site is located within the Inner West local government area, with the following zoning and density provisions:

- Land use zone: IN2 Light Industrial under *Leichhardt Local Environmental Plan 2013*.
- Floor space ratio (FSR): 1:1 (maximum permissible).

Figure 3.1: Land Use Zoning Map

Figure 3.2: Density (FSR) Map

Neighbouring sites recently zoned and proposed to be zoned for higher density residential and/ or mixed-use developments include the:

- Adjacent site to the east for seniors housing development.
- Kolotex/ Labelcraft site – zoned from IN2 to part R3 and B4.
- 149-151 Allen Street – zoned from IN2 to residential.

Additionally, the Parramatta Road corridor is identified by the State government for higher density land use.

3.2 Building Height

There is no maximum permissible building height on the site or surrounding areas.

3.3 Heritage

The site is not a heritage item or located in a heritage conservation area. There are no known items of aboriginal or archaeological significance on the site.

Figure 3.3: Heritage Map

To the **south**:

- Lambert Park, located directly to the south of the site, is an item of Local Heritage Significance, for historically being the home ground of the APIA Soccer Club.
- There are several items and local streetscape of local heritage significance, south of Lambert Park.

To the **west**:

- Haberfield heritage conservation area is located west of the site and the light rail corridor.

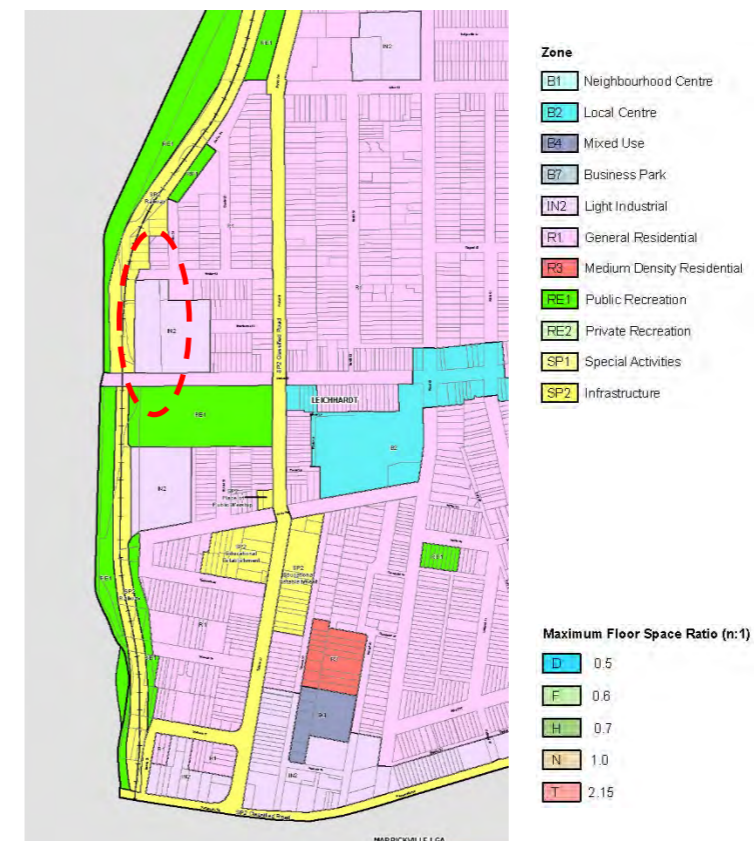


Figure 3.1: Land Use Zoning Map (source: *Leichhardt LEP 2013*)



Figure 3.2: FSR Map (source: *Leichhardt LEP 2013*)



Figure 3.3: Heritage Map (source: *Leichhardt LEP 2013*)



3.4 Urban Density Strategies and Directions

3.4.1 Greater Sydney Region Plan

The population of Greater Sydney at 4.7 million is projected to grow by 1.7 million by 2036. The NSW government has identified the demand for 725,000 additional homes in the Greater Sydney Region to meet the growing and changing population over the next 20 years.

The *Greater Sydney Region Plan: A Metropolis of Three Cities* (the Plan) is a regional plan that:

- Sets a 40-year vision (to 2056) and establishes a 20 year plan to manage growth and change for Greater Sydney in the context of social, economic and environmental matters.
- Informs district and local plans and the assessment of planning proposals.

The *Greater Sydney Region Plan* sites the Inner West within the Eastern Harbour City. (Figure 3.4: *The Eastern Harbour City*)

The population of the Eastern Harbour City is projected to grow from 2.4 million in 2016 to 3.3 million within the next 20 years, by 2036, with identified housing targets of:

- 46,550 persons – between 2016-2021.
- 157,000 persons – between 2016-2036.

The Plan aspires for Sydney to be a 30 minute city where the majority of residents live within 30 minutes from jobs, services, education and health facilities, with the Plan aiming at providing people with better access to housing, transport, employment, as well as social, recreational, cultural and creative opportunities. The Plan outlines 10 Directions to provide a liveability, productivity and sustainability framework. The directions to be considered in this Planning Proposal are:

- **Housing the City** – Giving people housing choices, with objectives for:
 - Greater housing supply (Objective 10).
 - Diverse and affordable housing (Objective 11).
- **A well-connected City** – Developing a more accessible and walkable city, with objectives for:
 - Integrated land use and transport (Objective 14).
- **Jobs and skills for the City** – Creating the conditions for a strong economy, with objectives for:
 - Industrial and urban services land is planned, retained and managed (Objective 23).
- **A City in its Landscape** – Valuing green spaces and landscape, with objective for:
 - Urban tree canopy cover is increased (Objective 30).
- **An Efficient City** – Using resources wisely, with objectives for:
 - Energy and water flows are captured, used and reused (Objective 34).
 - More waste is reused and recycled to support the development of a circular economy (Objective 35).

The Plan identifies the need to provide **liveable places**, and maintaining and improving liveability, by:

- Providing quality of life for residents.
- Providing housing infrastructure and services in the right location.
- Maintaining adequate housing supply to address price growth and improve housing affordability.
- Providing housing supply of the right type in the right area, taking into consideration and respecting the unique character of local neighbourhoods.
- Accommodating homes need to be linked to local infrastructure and to optimize existing infrastructure.

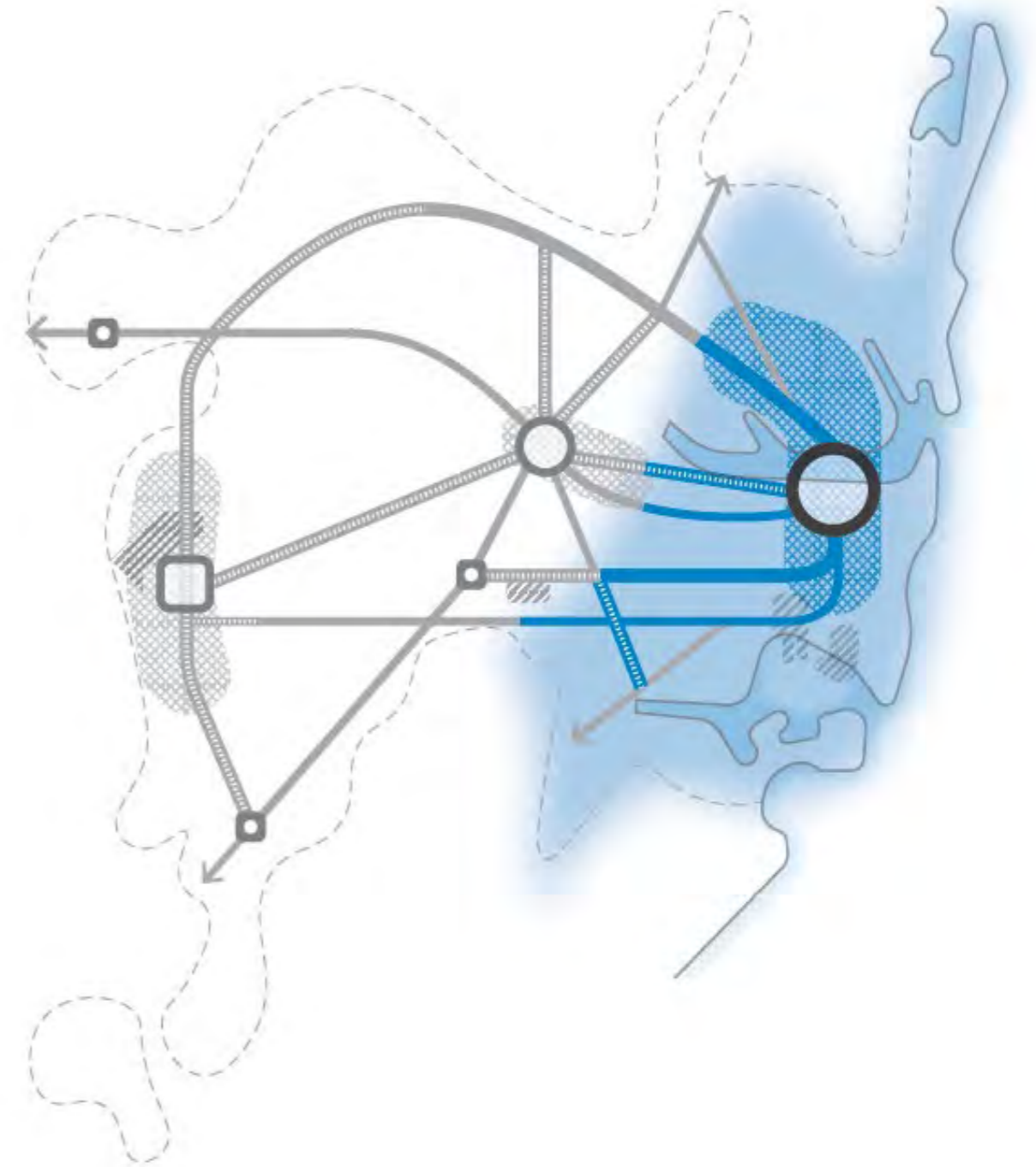


Figure 3.4: Eastern Harbour City (source: *Greater Sydney Region Plan*)

Eastern City District Plan

The Inner West is located within the Eastern City District. The strategic planning direction in the Inner West is guided by the Eastern City District Plan.

The District Plan's vision for the future of the Eastern City District is to:

- Nurture quality lifestyle through well-designed housing in neighbourhoods close to transport and other infrastructure.
- Retain industrial and urban services land.
- Being innovative in increasing urban tree canopy.
- Building effective responses to climate change and natural and urban hazards.

The Directions and Planning Priorities of the District Plan (aligned with *A Metropolis of Three Cities*) specifically applicable to this Planning Proposal that echoes the above vision, comprise:

- **Housing the City:**
 - Providing housing supply, choice (housing mix to cater for changing needs, household and age structures) and affordability, with access to jobs, services and public transport (Planning Priority E5).
- **A well-connected City:**
 - Delivering integrated land use and transport planning and a 30 minute city (Planning Priority E10).
- **Jobs and skills for the City:**
 - Retaining and managing industrial and urban services land (Planning Priority E12).
- **A City in its Landscape:**
 - Increasing urban tree canopy cover and delivering green grid connectors (Planning Priority E17).
- **An Efficient City:**
 - Reducing carbon emissions and managing energy, water and waste efficiently (Planning Priority E19).

The NSW Department of Planning, Industry & Environment projects population and household growth in the Eastern City District requires an additional 157,500 homes between 2016 and 2036, with the number of residents over 65 is expected to grow by 70% by 2036. Single persons households are expected to remain the dominant household types. Additionally, the Inner West is a local government area with largest projected growth in the over 65 years and over 85 age group.

The District Plan identifies that:

- More diverse housing types and medium density housing will create opportunities for older people to continue to live in their communities and established health and support networks.
- Development will be provided through urban renewal around new and existing infrastructure and infill development.

Locational criteria for urban renewal opportunities outlined in the Plan include:

- Aligning development with public transport routes.
- Catchment areas within walking distance (up to 10 minutes) of centres with rail, light rail or regional bus routes.
- Efficient interchanges with a comprehensive walking and cycling network.
- Distance from special land uses such as ports and airports.

Figure 3.5: Proximity of Site to Urban Nodes

Housing the City – Giving people housing choices

To create liveable neighbourhoods, the following housing principles are to be responded to:

- **Housing need** – projected housing need and demographic characteristics of the existing and growing community.
- **Diversity** – a mix of dwelling types, size, universal design, etc., as well as local housing preference.
- **Alignment of infrastructure** – opportunities to optimise transport infrastructure enabling access to job, health, education and recreational facilities.

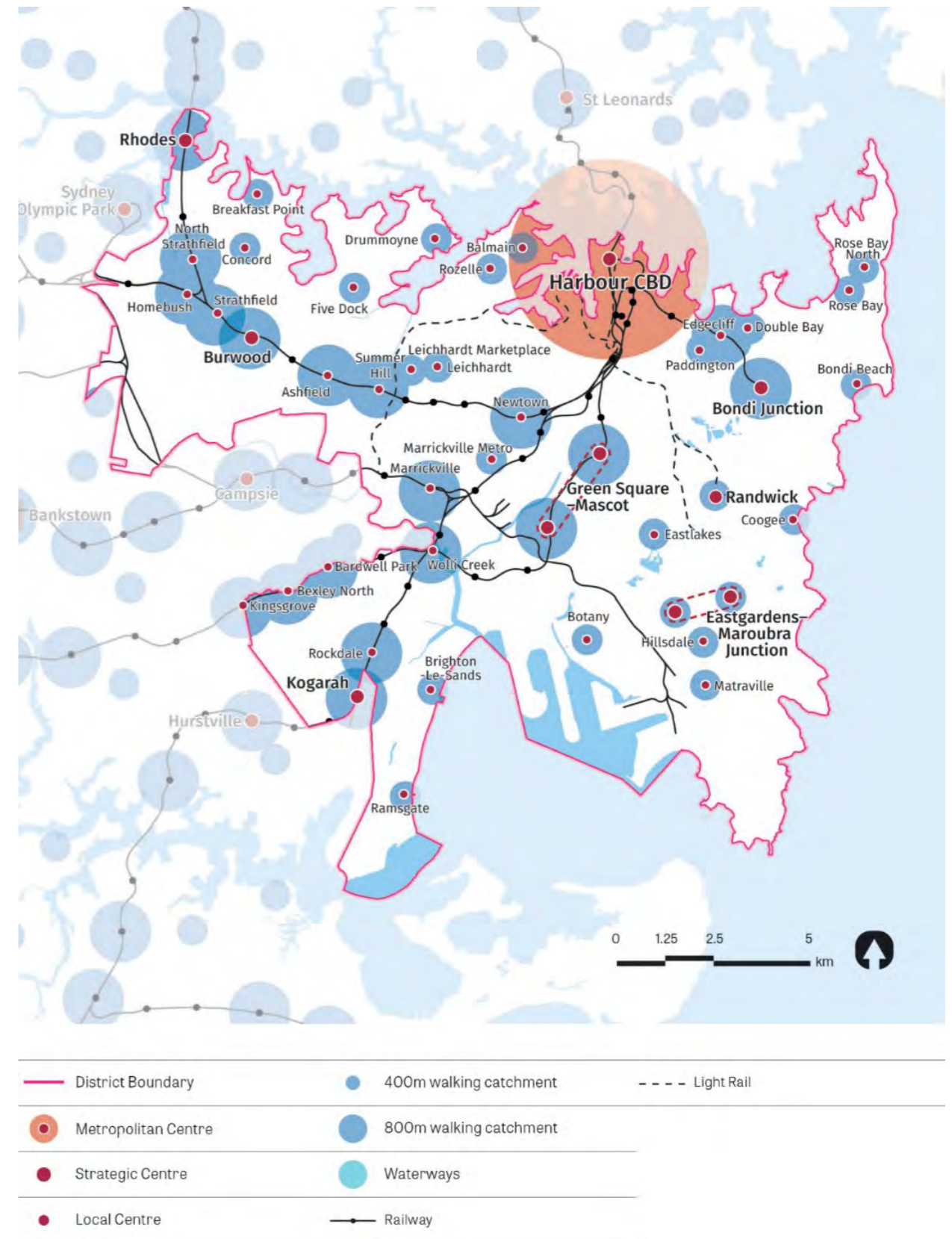


Figure 3.5: Proximity of the Site to Urban Nodes (source: Eastern City District Plan)

- **Displacement** – managing potential impacts of growth on existing communities, such as displacement.
- **Amenity** – opportunities that improve amenity, including recreation, the public realm, and increased walkable and cycle connections.
- **Engagement** – community engagement on neighbourhood priorities that can benefit existing and future communities.
- **Efficiency** – opportunities for innovations in waste management, water and energy provision.

Jobs and skills for the City – Creating the conditions for a strong economy

The Eastern District Plan requires the retention and management of industrial and urban services land (outlined in Planning Priority E12). Industry, manufacturing, warehousing, distribution and urban services contribute to Sydney's role as Australia's manufacturing capital.

Urban services include activities such as motor vehicle services, printing, waste management, courier services and concrete batching plants, that serve local communities and businesses. Demand for this land and good access to these services will increase, commensurate with population growth.

With emerging technologies and new industries with different requirements, the nature of this economic sector will continue to change. Industrial land is evolving from traditional industrial and manufacturing lands into complex employment lands.

For the Eastern City District, the approach to managing industrial land is that it be retained and managed as these industrial lands are required for economic and employment purposes. The management of these lands should accommodate evolving business practices and changes in needs for urban services from the surrounding community and businesses.

3.4.2 Parramatta Road Urban Transformation Strategy

The *Parramatta Road Urban Transformation Strategy* identifies higher development corridor densities and sets the direction for future rezonings along the Parramatta Road corridor between Granville (to the west) and Camperdown (to the east). The Strategy proposes to deliver:

- 27,000 new dwellings
- 50,000 new jobs
- A direction to retain industrial and employment lands
- A rapid bus service
- A focus on provision of affordable housing
- Open space

The Strategy is a Section 117 of the EP&A Act 1979 Ministerial Direction for implementation by approval authorities.

Figure 3.6: Parramatta Road Corridor – Parramatta Transformation Strategy

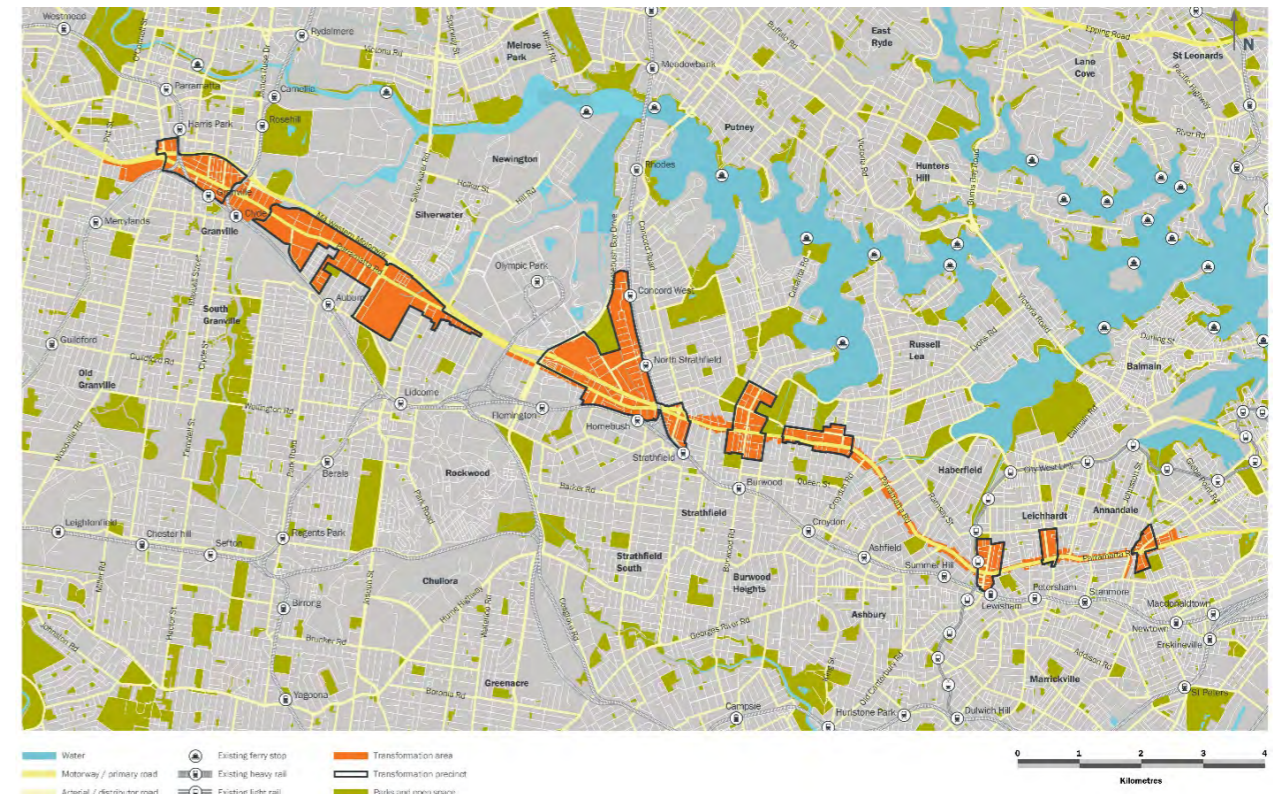


Figure 3.6: Parramatta Road Corridor – Parramatta Transformation Strategy (source: *Parramatta Road Corridor Urban Transformation Strategy*)

3.5 Urban Density Precedents

Apartments within urban areas, close to amenities, transport, retail and employment are becoming the residence of choice among younger, as well as older people (retirees and seniors).

Preferred locations for these dwellings are on transport nodes, public transport corridors of heavy, light rail and buses, and in urban centres. These are optimum areas for urban renewal and intensification for both residential and commercial development, providing opportunities for jobs, compact living and services in close proximity and within walking distance of public transport. Additionally, higher intensity development along public transport corridors support investment in transport infrastructure, increases public transport patronage and their viability of operation. Living close to public transport has the benefit of reducing car dependence as well as contribute to sustainability.

Making more housing affordable by increasing supply will improve home ownership for the 25-35 year age group of first home buyers. This can be addressed partially by making more sites available for the construction of medium and high density housing. Matters that restrict site availability must be addressed – to include encouragement of infill development, particularly on sites that are losing their economic viability. Additionally, land in suitable locations should be assigned the appropriate zone, density and building heights that will facilitate efficient development.

Precincts in centres and along public transport corridors, close to the subject site, are increasingly approved for higher density mixed use and/ or residential developments.

Recent proposals that incorporate residential uses within existing IN2 Industrial zone include:

- 469-483 Balmain Road, Lilyfield – with site area of 6,824m².
- 141-161 New Canterbury Road, Petersham – with site area of 2,334m².

A number of residential developments have been approved and constructed within approximately 1-2km of the site. The floor space ratios and heights of these developments range from 1.5:1 up to 3:1, with heights ranging from 4-13 storeys. A number of these developments are on former industrial sites.

These higher density developments are contributing to the changing urban fabric of the Inner West.

Figure 3.7: Urban Density Precedents within West Leichhardt and along the Inner West Light Rail Line

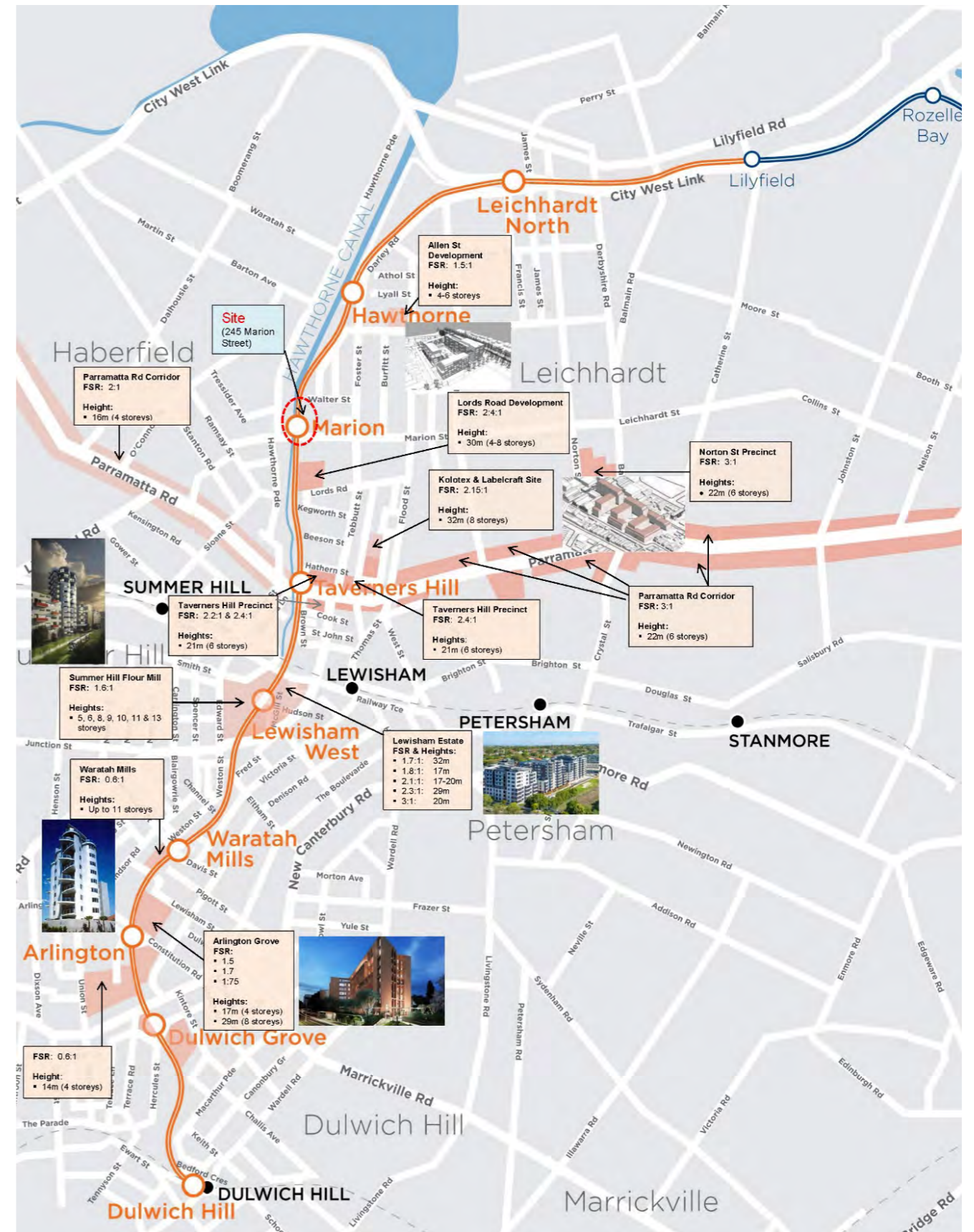


Figure 3.7: Urban Density Precedents within West Leichhardt and along the Inner West Light Rail Line (source: A. Thomas)

4.0 REGIONAL CONTEXT

4.1 Regional Context

The site is located within Sydney's Inner Western suburb of Leichhardt (Figure 4.1). Leichhardt is located approximately:

- 7km west of Sydney's CBD.
- 6km from the entertainment and convention precinct of Darling Harbour and the Sydney Fish Market.
- 4-5km from tertiary educational facilities of Sydney University and UTS campus at Ultimo.
- 4.5km from Broadway.

Figure 4.1: The Site and its Regional Context

4.2 Strategic Context

The site is within the Leichhardt ward of the Inner West local government area (LGA). The LGA is on land that traditionally belonged to the Gadigal and Wangal people, of the Eora nation. It is a unique area with a long cultural heritage and a special beauty that comes from its Sydney Harbour location and its old suburb origins.

The Inner West LGA covers an area of 36km² and has a current population of 185,000 people.

The LGA consists of the uniquely diverse and culturally rich suburbs of Annandale, Balmain, Birchgrove, Leichhardt, Lilyfield and Rozelle. The LGA has an area of 10.03 km² and a population of 52,000.

The Inner West is one of the most densely populated areas in metropolitan Sydney with an average of around 40 dwellings per hectare (approx. 100 people per hectare) with an average household size of 2.5 persons per dwelling, which is lower than the Sydney average of 2.7.

Demographically, the Leichhardt LGA has a relatively high proportion of residents in the 25-39 age group, with a low proportion of residents aged 14 years or younger. Leichhardt, additionally, has a high proportion of single person households. Sydney's Inner West is a highly sought after urban residential area, based on residential property sales.

4.3 Transport Network

4.3.1 Road network

The site is within a kilometre from the Parramatta Road Corridor. This corridor, stretching from Parramatta to the Sydney City, has been identified by the State government as an important renewal and urban growth corridor with the capacity to deliver additional employment and residential accommodation, with potential to accommodate around 63,000 new dwellings and 50,000 new employment opportunities by the year 2030. This corridor will generate new medium to high density urban forms and will alter the urban landscape along this corridor.

4.3.2 Light and heavy rail network

The site is serviced by the Inner West light rail network located along the former goods freight line that runs from the Sydney CBD to Dulwich Hill, with the Marion light rail station adjacent to the site. The journey to the CBD is approximately 8km taking 25 minutes.

The site is located approximately 1.3km from Lewisham railway station which is on the Inner West heavy rail line that connects to the Sydney CBD and to Parramatta (to the west) and Liverpool and Leppington (to the south-west).

Figure 4.2: Regional Transport Network



Figure 4.1: The Site and its Regional Context (source: Google Maps)

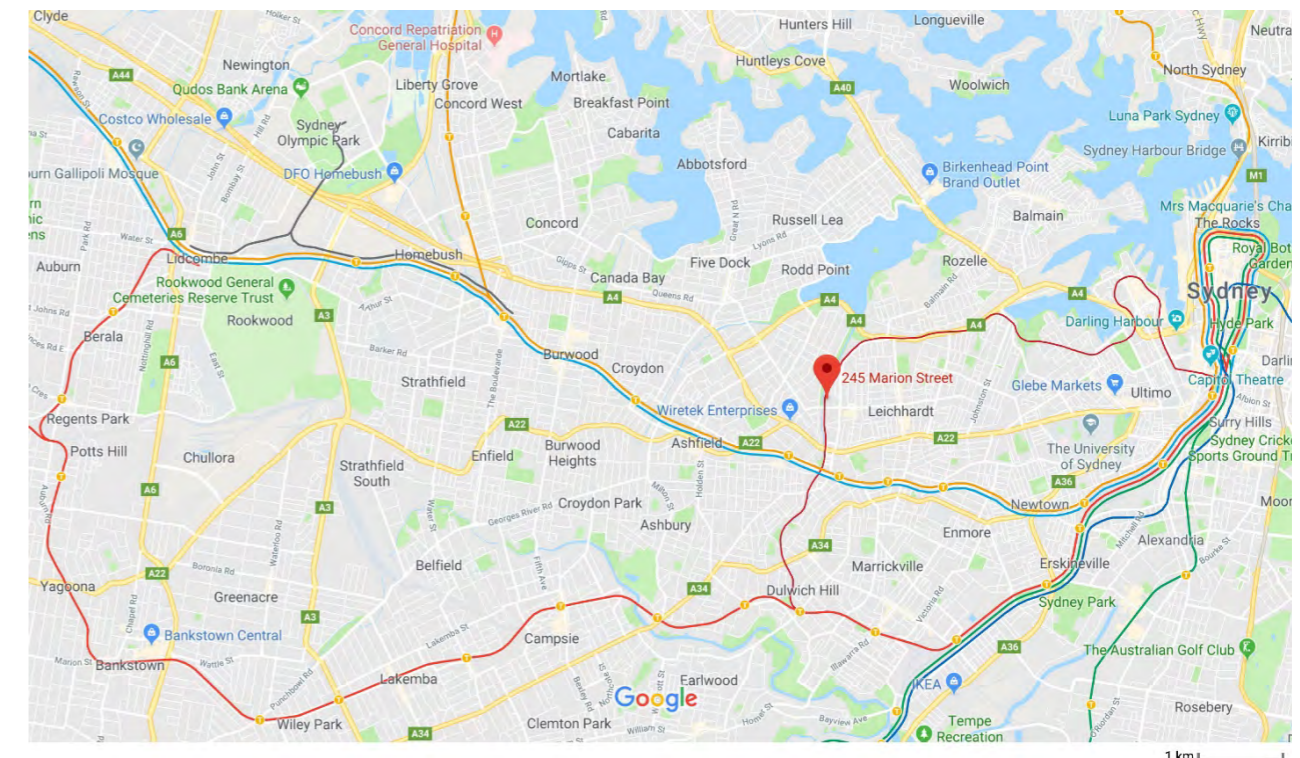


Figure 4.2: Regional Transport Network (source: Google Maps)

5.0 LOCAL CONTEXT

5.1 Local Context

The site is located within the suburb of Leichhardt. The suburb extends from:

- Parramatta Road (to the south) to City West Link Road (to the north).
- The light rail line and Hawthorne Canal (to the west) to Whites Creek (to the east).

Leichhardt has gently undulating topography with Leichhardt Town Hall marking the highest point in this region, at the corner of Marion Street and Norton Street.

Key landmarks within Leichhardt are:

- The Civic precinct, with town hall, council chambers, council administrative offices and public school – located at the junction of Marion Street and Norton Street.
- Norton Street commercial, retail and entertainment precinct (Leichhardt Town Centre) – located between the Civic precinct (up to Macauley Street towards the south-western end of Pioneer Park) and Parramatta Road. The retail strip along Norton Street also extends northwards towards the City West Link.

To the west of the site is the suburb of Haberfield and the Haberfield Heritage Conservation Area, which is a low-density residential precinct of local heritage significance.

Fig. 5.1 – Local Context



Figure 5.1 – Local Context (source: Google Maps)

5.2 West Leichhardt

The site is specifically located in the West Leichhardt Distinctive Neighbourhood, which is on the westerly slopes of a main ridge that peaks at the junction of Marion Street and Norton Street. (Figure 5.2 – West Leichhardt Distinctive Neighbourhood). The Neighbourhood is bordered by:

- William Street – to the north;
- Hawthorne Canal – to the west;
- Parramatta Road – to the south; and
- Elswick Street – to the east, and between Allen Street and Marion Street – extending to the rear of properties fronting Norton Street.

Figure 5.2: West Leichhardt Distinctive Neighbourhood Sub- Areas

5.2.1 Land use

The West Leichhardt Neighbourhood comprises a mix of residential, industrial and business land uses. Residential is the predominant land use, with pockets of light industry and businesses (in the form of commercial and retail) located throughout the precinct.

5.2.2 Development pattern

The West Leichhardt Distinctive Neighbourhood comprises the original land grants of Hampton Farm (granted in 1794), Macquarie (1811), and Kegworth (1810). These land grants, subdivided and developed at different times, resulted in the irregular subdivision pattern and street layout of the neighbourhood.

The predominant street pattern in West Leichhardt is north-south, generally following the land contours, with a more fragmented east-west pattern of development allowing views to the west.

The streets are mainly wide and tree-lined with a carriageway width varying from 12-20m. The streets are bordered by footpaths between 2-3m in width, incorporating 1.5-2m wide grassed verges. A scattering of native trees and shrubs are planted on the verges, with mature trees predominantly located on private properties.

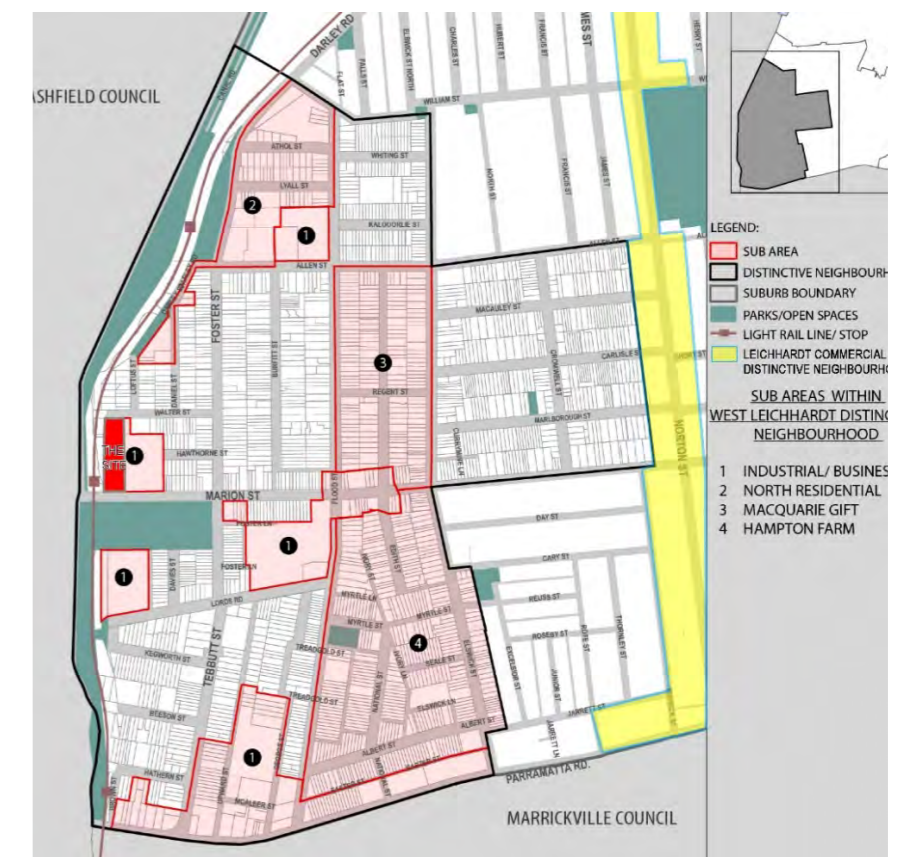


Figure 5.2: West Leichhardt Distinctive Neighbourhood Sub- Areas (source: Leichhardt DCP 2013)

The character of West Leichhardt is mixed – predominantly small residential allotments of varying sizes, with pockets of larger industrial and business landholdings on historically larger landholdings, particularly close to the rail corridor.

Figures 5.3a & b: Historical Aerials of West Leichhardt

5.2.3 Residential areas

The residential building stock in West Leichhardt is predominantly free-standing/ detached or semi-detached dwellings and low-scale in form (single and two storeys in height) on small allotments aligning in either a north-south or east-west direction, in accordance with the street alignment. Front setbacks of dwellings are generally consistent within their specific streetscapes.

The architecture in the area is primarily late Victorian and Federation, with scattered examples of Interwar period dwellings and intact weatherboard cottages. Building materials within this precinct are face brick (red or brown) with terracotta roof tiles, or painted timber weatherboard with corrugated iron roofing. Roof forms (hipped or gabled) are mainly pitched between 30°-45°. These dwellings of the late 19th and 20th century provide a homogenous townscape quality within the West Leichhardt Neighbourhood area. Contemporary development is also scattered throughout the neighbourhood, mainly in the form of residential flat buildings and townhouse style developments.

North and east

To the north and east of the site is a low density residential neighbourhood, with a traditional pattern of development of a mix of one and two storey detached dwellings sited with a small setback to the street and a small rear yard for private open space. The dwellings are predominantly modest in size, of late Victorian, Federation and Interwar styles, interspersed with some contemporary detached residential and townhouse developments.

Figure 5.4: Views of Housing Typologies along Foster Street

Figure 5.5: Views of Housing Typologies along Daniel Street

5.2.4 Industrial areas

Pockets of industrial land uses are predominantly located:

- Along Parramatta Road within an extended area located between Tebbutt Street and Flood Street. A number of industrial sites close to Parramatta Road have been recently rezoned for medium density residential (R3 zone) and mixed use (B4) land uses.
- On a number of isolated industrial sites adjacent to the former goods rail line, which has been transformed into the light rail line, sited within low density residential areas. These include:
 - 245 and 237 Marion Street – with 237 approved as an age care facility and 245 being the subject site.
 - The Lords Road precinct – south of Lambert Park (subject to a Planning Proposal for redevelopment).
- Site at the junction of Allen Street and Flood Street (approved for multi-unit residential development).

Industrial premises on these sites have generally large footprints are generally single to two storeys in height.

5.2.5 Business areas

Business areas within the West Leichhardt Distinctive Neighbourhood are located along Marion Street and includes:

- Leichhardt Market Place shopping centre, the central retail and commercial focus for this precinct located on the corner of Marion Street and Flood Street, extending along Flood Street to Lords Road.
- The main street business precinct along Marion Street, extending from Leichhardt Market Place at Flood Street eastwards to Edith Street.

The business premises are single to two storeys in height.

Figure 5.6: Industrial & Business Sub Areas



Figure 5.3a: West Leichhardt – c.1930s
(source: DFSI Spatial Services)



Figure 5.3b: West Leichhardt – c.1942



Figure 5.4: Views of housing typologies along Foster Street (source: A.Thomas)



Figures 5.5: Views of Housing Typologies along Daniel Street (source: A.Thomas)

5.3 Haberfield Heritage Conservation Area

To the west of the site, beyond Hawthorne Canal and The Greenway open space corridor, is the Haberfield Heritage Conservation Area. The area is located north of Parramatta Road and extends to the City West Link Road/ Dobroyd Parade to the north-west. The area is listed as an Urban Conservation Area by the National Trust (1978) and is on the Register of the National Estate (1990).

Haberfield has historic significance as a planned and designed Garden Suburb in its subdivision layout. Its pattern of detached dwellings on allotments, tree-lined streets, Federation houses in landscaped garden settings.

Dense canopied of approximately 10m in height provides a landscape buffer between the proposed development and the heritage conservation area.

Figure 5.7: Heritage Items and Conservation Areas within the Surrounding Area

5.4 Amenities

The site is located within approximately:

- 500m of Leichhardt Marketplace – which is a well-established neighbourhood retail and business centre bounded by Marion Street, Flood Street and Lords Road.
- 1.2-1.5km of the Leichhardt Town Centre, focused around Norton Street – which provides a mix of retail, dining and community (library) facilities and cinema (Palace Cinema at Norton Street).
- 400m from Kegworth Public School on Tebbutt Street.
- 1.2km from Leichhardt Public School on Marion Street.
- Leichhardt Family Day Care Centre – directly east of Lambert Park.

Figure 5.1 – Local Context

5.5 Open Space and Recreational Areas

Open spaces and recreational areas within this precinct are:

- Lambert Park: Public open recreational area with football (soccer) field – south of the site, located at the intersection of Marion Street and Foster Street. The park has stadium facilities of dressing rooms, social club, and press and media facilities. Additionally, the park has a passive recreation space at the corner of Marion and Flood Streets.
- Shields Playground: Public open space at the corner of Allen Street and Darley Street, north of the site.
- Hawthorne Canal Reserve: Public open space corridor adjacent and parallel to Hawthorne Canal and the light rail, that incorporates Hawthorne Canal Reserve and Richard Murden Reserve (to the north). The open space corridor offers pedestrian, cycle (in the form of trails) and public transport (light rail) connections from Dulwich Hill to the Iron Cove Bay foreshore areas, Sydney Harbour foreshore attractions, Darling Harbour and the CBD.
- Wanga Nura Park: Pocket park at the corner of Myrtle Street and Flood Street, south-east of the site.
- Marr Reserve Playground: Playground located between Cary Street and Reuss Street, south-east of the site.

Figure 5.1 – Local Context

5.6 Local Transport Network

5.6.1 Site connectivity

The site is well situated, is accessible by vehicular transport modes and well served by public transport of light rail and bus.

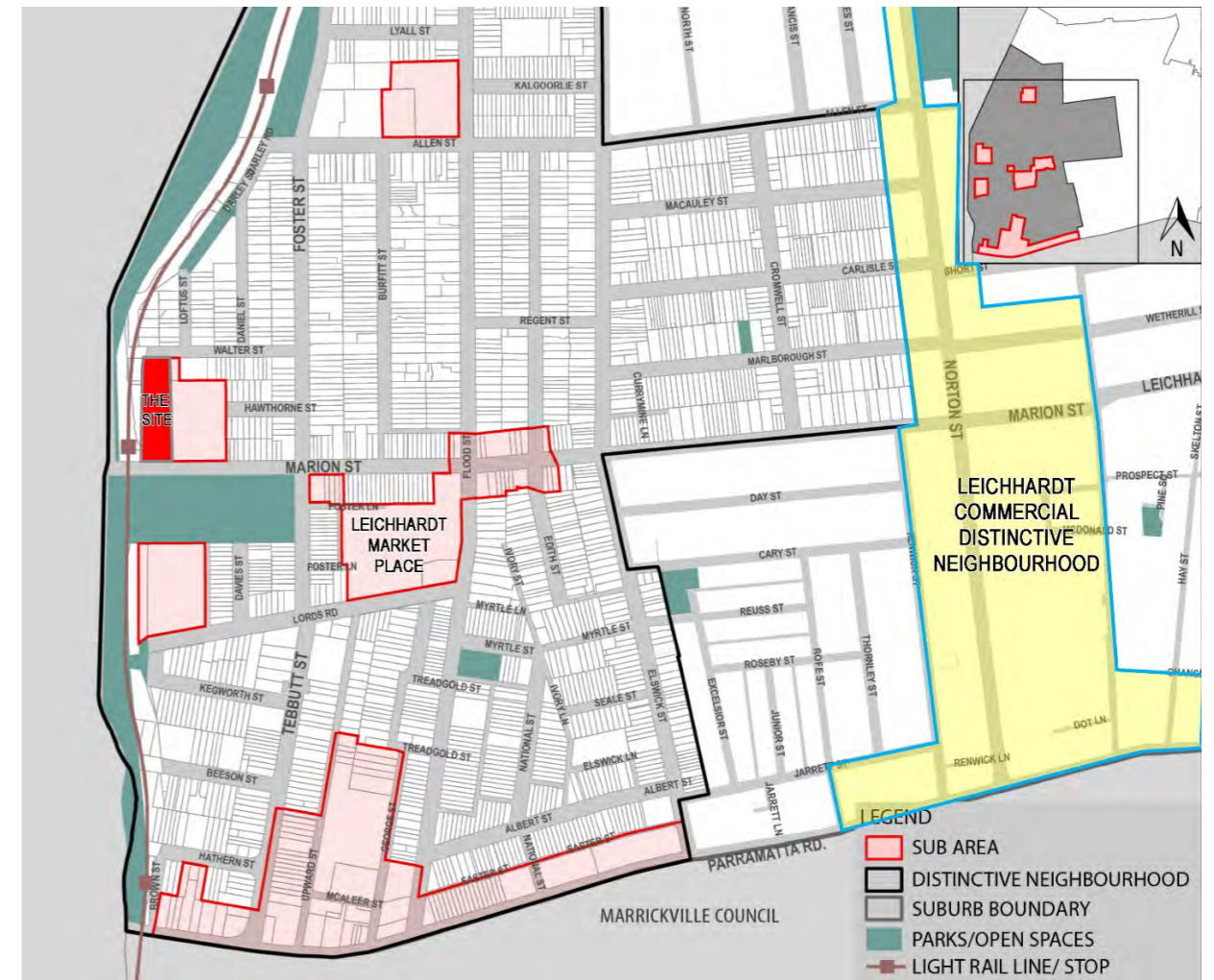


Figure 5.6: Industrial & Business Sub Areas (source: Leichhardt DCP 2013)



Figure 5.7: Heritage Items and Conservation Areas within the Surrounding Area

5.6.2 Vehicular network

The site is located at Marion Street, which is a classified secondary road with good connections to:

- Marketplace Leichhardt and the Leichhardt and Norton Street retail and civic precinct – to the east.
- The City West link to the west (via Ramsay Street).
- The City West link to the north (via Foster Street and Darley Road).
- Parramatta Road to the south (via various north-south cross streets).
- Adjacent suburbs of:
 - Haberfield (west);
 - Summer Hill, Petersham and Camperdown (south); and
 - Leichhardt and Annandale (north).

5.6.3 Public transport network

Light rail

The site is located adjacent to the Inner West light rail line that links the Inner West suburbs to the Sydney CBD via Rozelle Bay, Glebe, Sydney Fish Market, The Star, Pyrmont and Darling Harbour.

Bus

Marion Street is located along a public transport route – on five inner west bus routes linking Sydney CBD, to Leichhardt Town Centre, Parramatta Road, to surrounding suburbs and the university campuses of Sydney University and University of Technology and Science (UTS).

Bus stops are located to the west (west of Hawthorne Parade) and to the east (west of Foster Street) of the site.

Heavy rail

Lewisham station, located on the Inner West rail line, is approximately 1.3km from the site. The line extends from the Sydney CBD to Parramatta (to the west) and Liverpool and Leppington (to the south-west).

Figure 5.8: Local Transport Network

5.6.4 Cycle network

On-road cycleways are located along Marion Street and key local roads providing good connectivity to local areas.

A cycleway is located along the Greenway, which is a 5km green corridor that connects from the Cooks River pathway at Earlwood (south) to the Bay Run at Iron Cove (north). The corridor with a shared cycle and pedestrian track follows the old Rozelle goods rail freight line and runs along Hawthorne Canal (to Parramatta Road and southwards) and links to the bay at Iron Cove and northwards to Victoria Road.

5.6.5 Pedestrian network

Pedestrian travel within the neighbourhood is via footpaths located on either one or both sides of the street. Footpaths are located on both sides of Marion and Walter Streets.

A shared path (cycle and pedestrian) is located along The Greenway, west of the light rail corridor and Hawthorne Canal, that extends from Cooks River (to the south) to the Bay at Iron Cove (to the north), traversing the Inner West suburbs along the light rail line. The shared path additionally provides an easy link to Dulwich Hill railway station.

Within the residential precinct to the north of the site, there is no direct pedestrian access from the western side of Walter Street to the shared path or the light rail stop. Light rail patrons are required to travel via Foster Street (north-south) and Marion Street (east-west) to the stop.

Figure 5.9: The Greenway

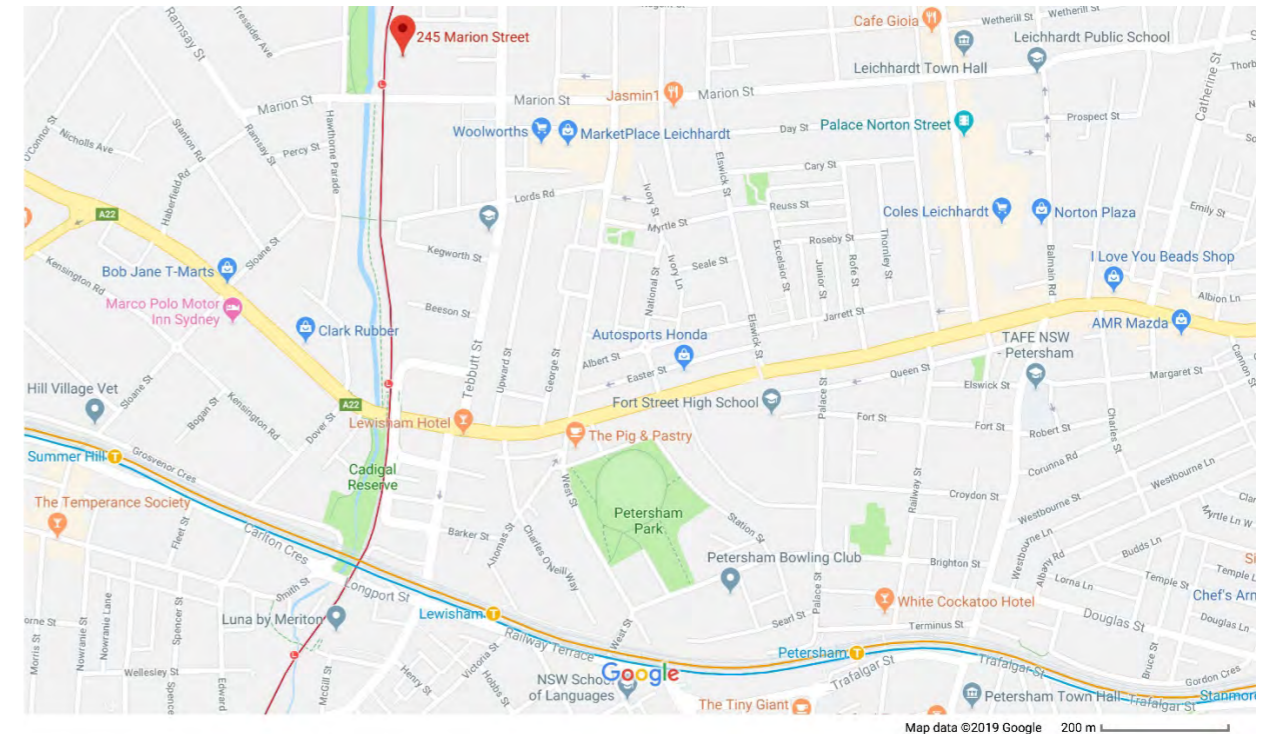


Figure 5.8: Local Transport Network (source: Google Maps)



Figure 5.9: The Greenway (source: Inner West Council)

6.0 SITE ANALYSIS

6.1 The Site

The site is bounded:

To the **south** by:

- Marion Street – a classified secondary road and bus corridor.
- Lambert Park – located south of Marion Street. Park extends from the light rail corridor to Foster Street to the east.

To the **north** by:

- Walter Street – a local road.
- Low density residential precinct comprising single and two storey detached dwellings on small allotments.

To the **east** by:

- The Marion – a Uniting church residential age care facility, 2-3 storeys in height. The facility extends to Hawthorne Street to the east, with vehicular access to the facility from that street.
- Low density residential precinct with single and two storey detached and attached dwellings on small allotments.

To the **west** by:

- The Inner West light rail line (formerly the Rozelle goods rail line) that extends from Central Station Pyrmont (to the north) to Inner West suburbs up to Dulwich Hill (to the south).
- The Greenway corridor along Hawthorne Canal with shared cycle and pedestrian paths.
- Haberfield heritage conservation area comprising low density detached dwellings to the west of Hawthorne Parade.

Figure 6.1: Site Aerial

Figure 6.2: The Site

6.2 Climate

6.2.1 Solar pattern

The site is aligned with the length of the site in a north-south direction. There are no developments adjacent to the site to the west. With a 20m wide street (Marion Street) along the site's southern boundary, the site's alignment reduces overshadowing of the proposed development onto adjacent development. *Figure 6.3: Solar Pattern*

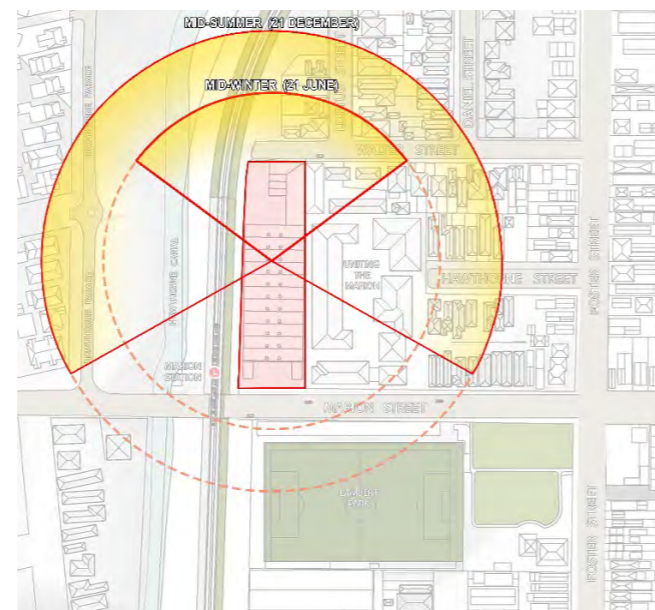


Figure 6.3: Solar Pattern
(source: FJT)



Figure 6.1: Site Aerial (source: Google Maps)

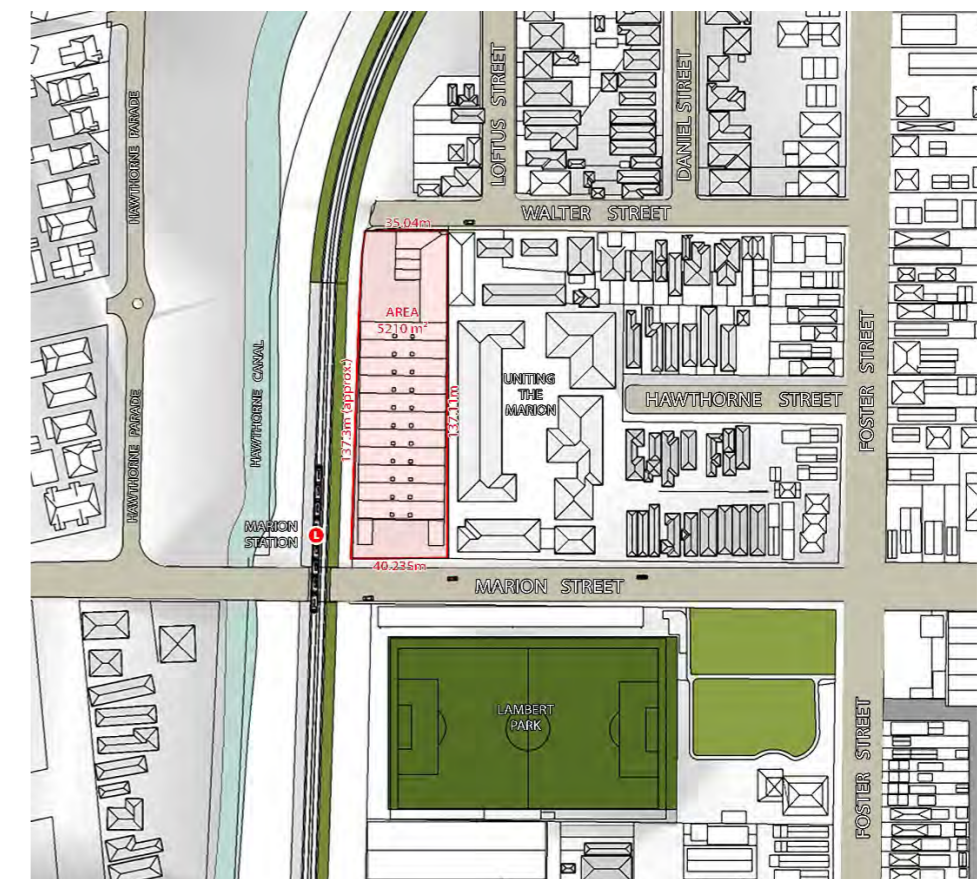


Figure 6.2: The Site
(source: FJT)

6.2.2 Wind pattern

Spring and Autumn

- AM: Wind in all directions with stronger breezes from the north-westerly, westerly and southerly directions.
- PM: Breezes predominantly from the north-easterly, easterly and southerly directions.

Figure 6.4: Wind Patterns – Spring, Autumn, Summer & Winter

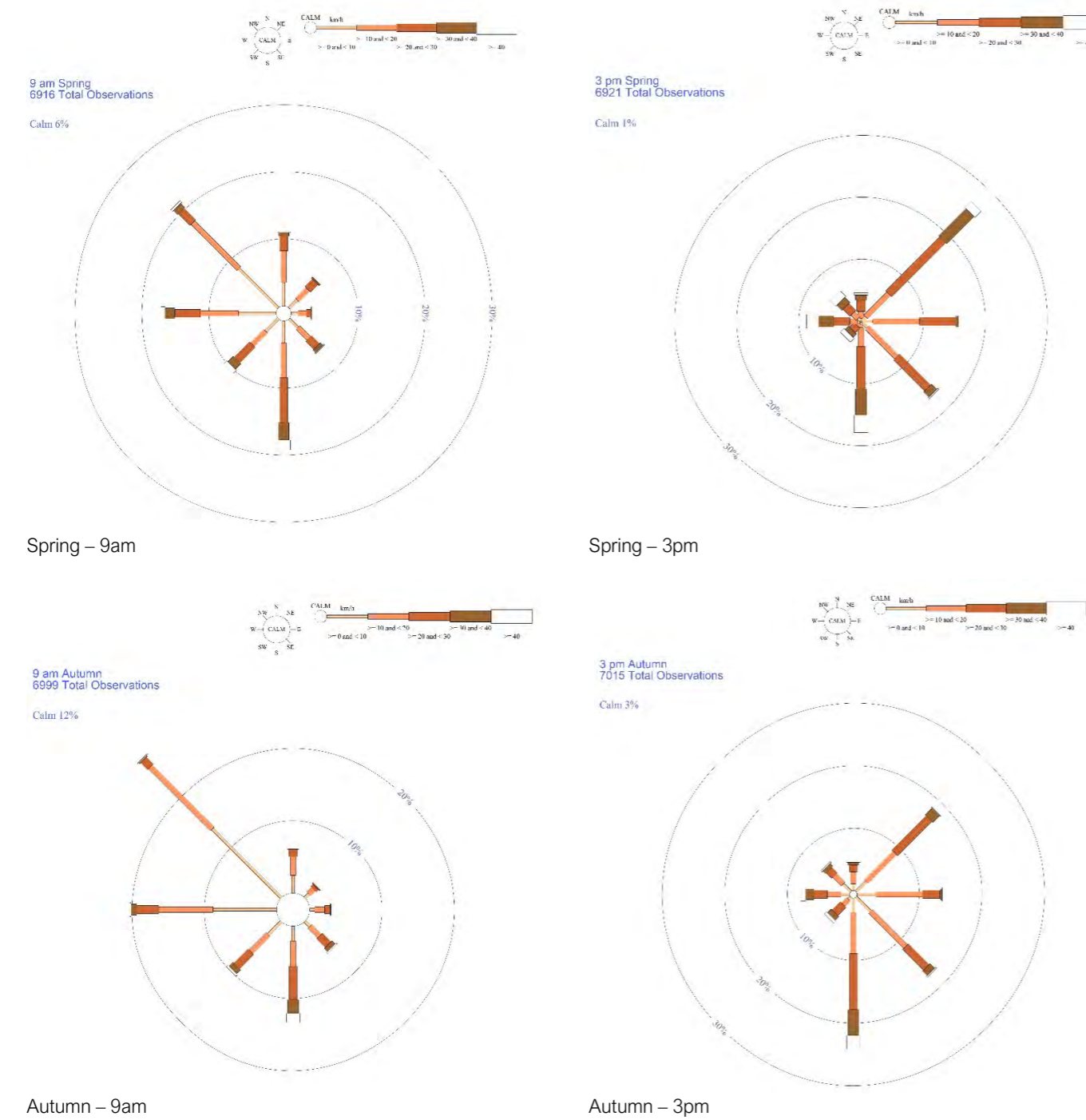


Figure 6.4: Wind Patterns (source: Australian Bureau of Meteorology)

Summer

- AM: Wind generally in all directions with stronger breezes from the south.
- PM: Breezes predominantly from north-easterly to southerly direction.

Winter

- AM: Wind direction predominantly from the north-westerly to westerly direction.
- PM: Wind generally in all directions with stronger breezes from the westerly and southerly directions.

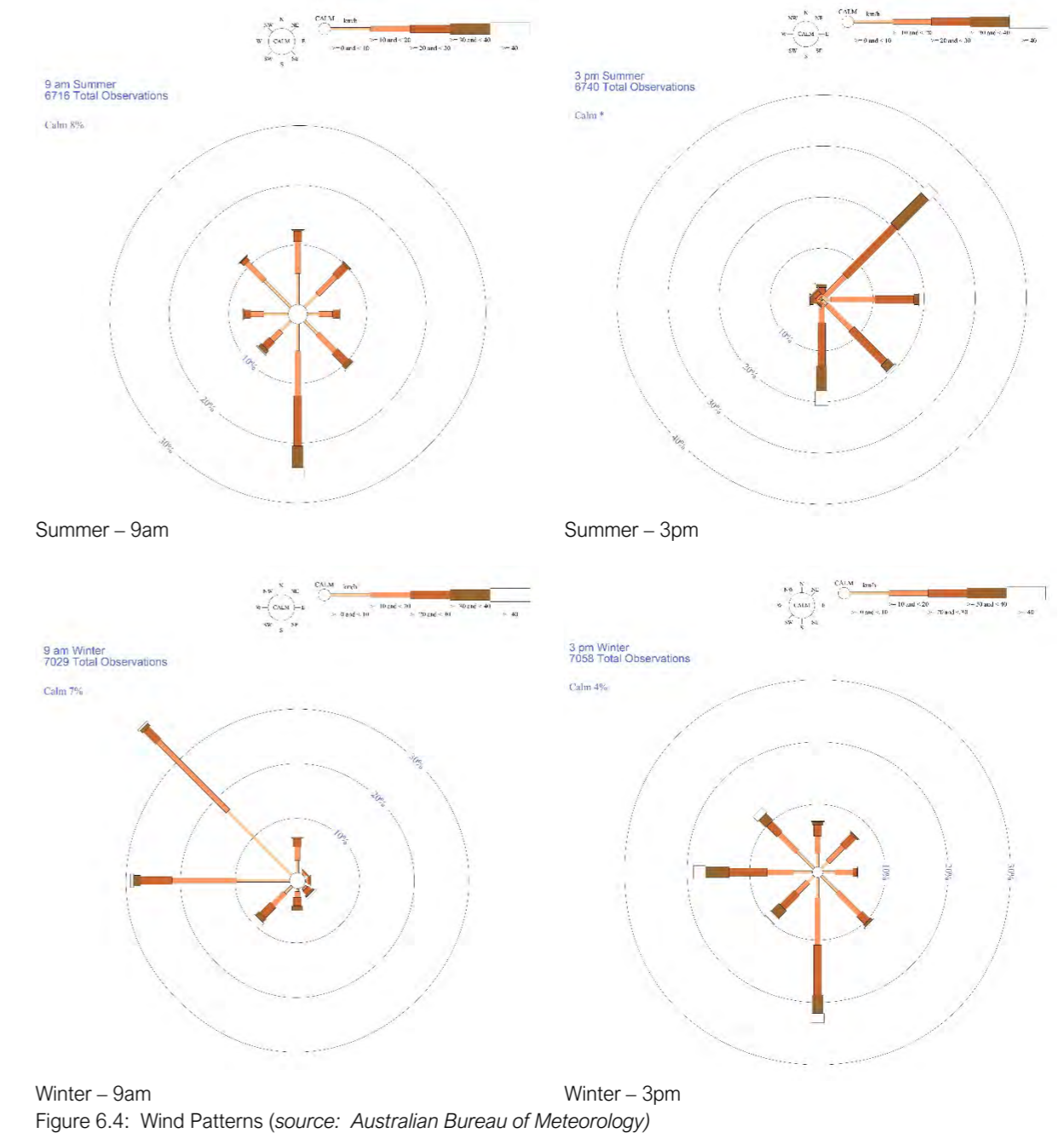


Figure 6.4: Wind Patterns (source: Australian Bureau of Meteorology)

6.3 Site Topography

The site is relatively flat with a fall of 150mm (approx.), falling from the south at Marion Street (with RL 4.0 approx. at the site's southern boundary) to north at Walter Street (with RL 3.85 approx. at the site's northern boundary).

Contextually, the topography of Leichhardt has long, gentle slopes that enable views out to the east, across the ridge of Annandale to the City, Haberfield to the west, and the north shore to the north.

Figure 6.5: Site Topography

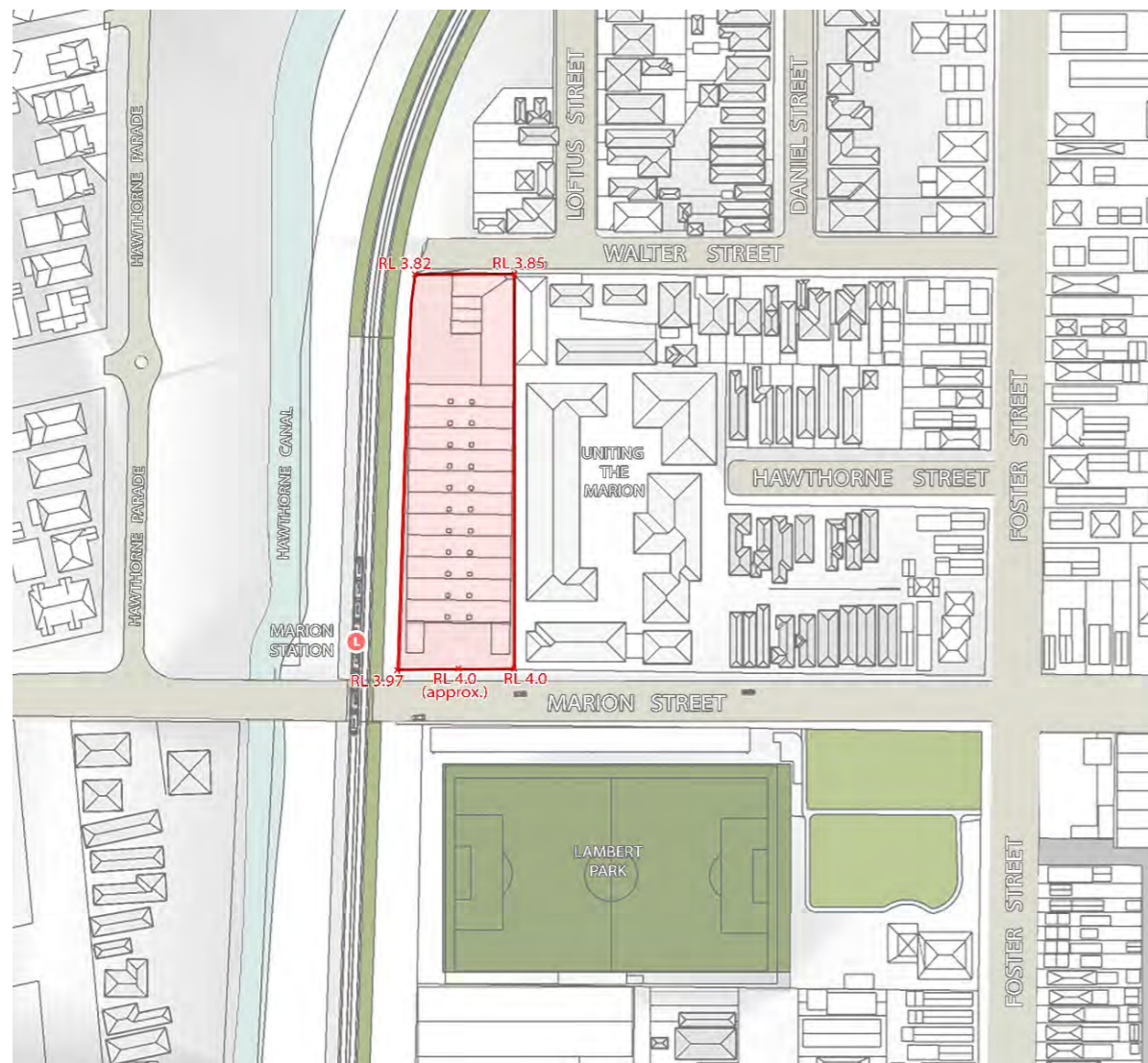


Figure 6.5: Site Topography (source: FJT)

6.4 Vegetation and Landscape Features

6.4.1 Site vegetation

There is little vegetation on the site of landscape or ecological value.

Existing vegetation on the site comprises a single palm tree within the front landscaped area and low level planting within the building setback area to Marion Street.

Several large trees are located on the north-western corner of the site, near Walter Street.

6.4.2 Surrounding vegetation

Well-established trees, with canopies of 8-10m in height, are located along both sides of the light rail corridor and along the Greenway corridor alongside Hawthorne Canal. The dense canopy of trees provides a dense vegetation buffer to the Haberfield conservation area.

The football field at Lambert Park located directly south of the site, south of Marion Street is grassed. The informal neighbourhood park to its east is sited among well-established trees.

Figure 6.6: Vegetation and Landscape



Figure 6.6: Vegetation and Landscape (source: FJT)

6.5 Noise

6.5.1 Road

The site adjoins Marion Street, a classified secondary road, to the south.

6.5.2 Light rail

Noise from the Inner West light rail line was identified in its Environmental Assessment to range from:

- 60 dBA during the day (level of conversation at 2m).
- 55 dBA during the evening.
- 50 dBA at night (quiet).

6.5.3 Aircraft

The site is not within the ANE125 contour and is therefore not directly impacted by aircraft noise.

6.5.4 Lambert Park

The football field to the south of the site has the potential to generate noise. Noise levels are not expected to be frequent, prolonged or at a high level to unduly impact on residential amenity.

These external noise sources which may affect the proposed development will be fully assessed at a development application stage.

Figure 6.7: Noise

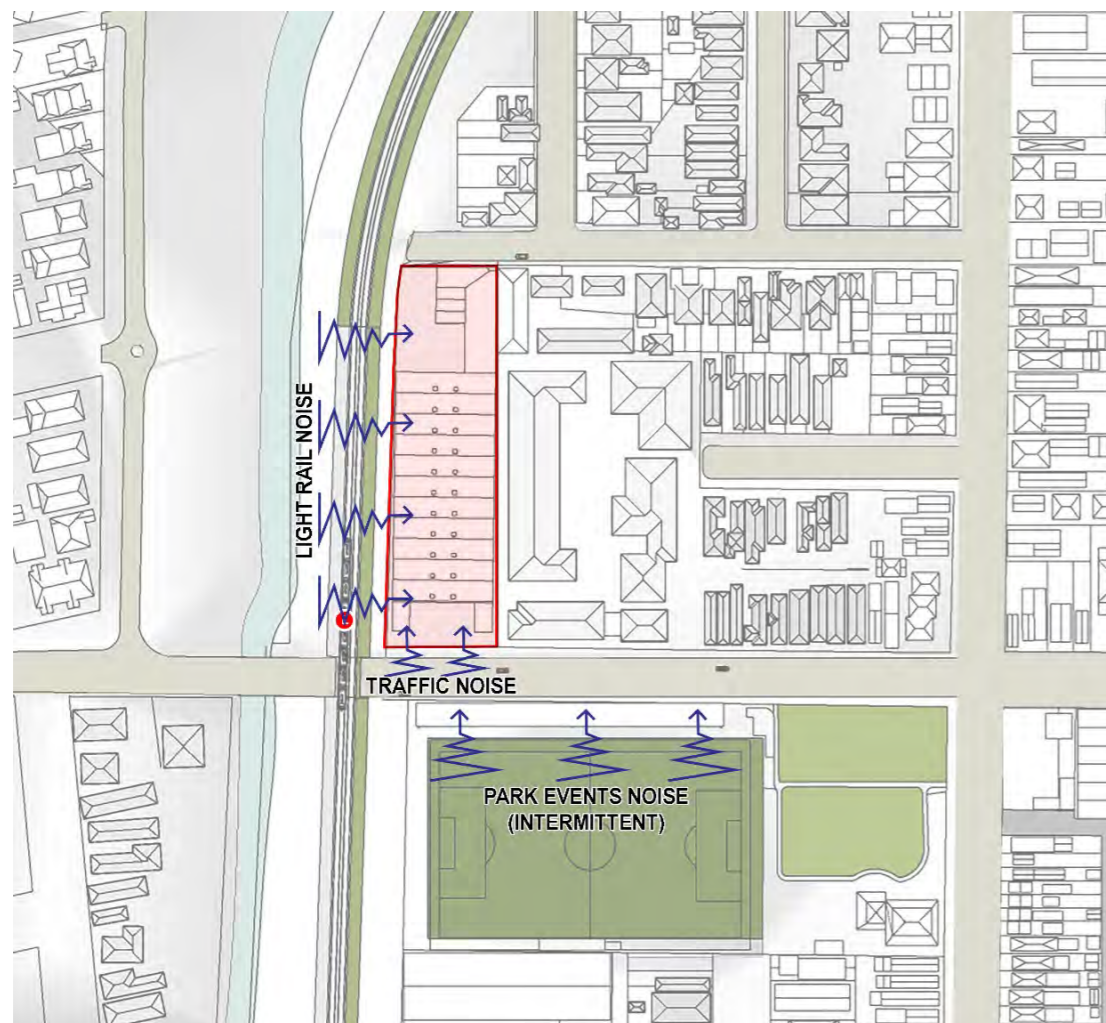


Figure 6.7: Noise

6.6 Views

Views from Ground and 2 storeys in height are limited:

- To the west – of the light rail embankment.
- To the east – of the aged care facility.
- To the north and south – of the local streetscapes of Walter and Marion Streets.

Views from upper levels (3 storeys+) will be of:

- To the south – of Lambert Park.
- To the west – the green corridor along Hawthorne Canal and its canopied trees, with Haberfield beyond and distant views towards Iron Cove Bay and the Balmain peninsula.
- To the north and north-east – of Leichhardt with distant city views beyond.

Figure 6.8: Views

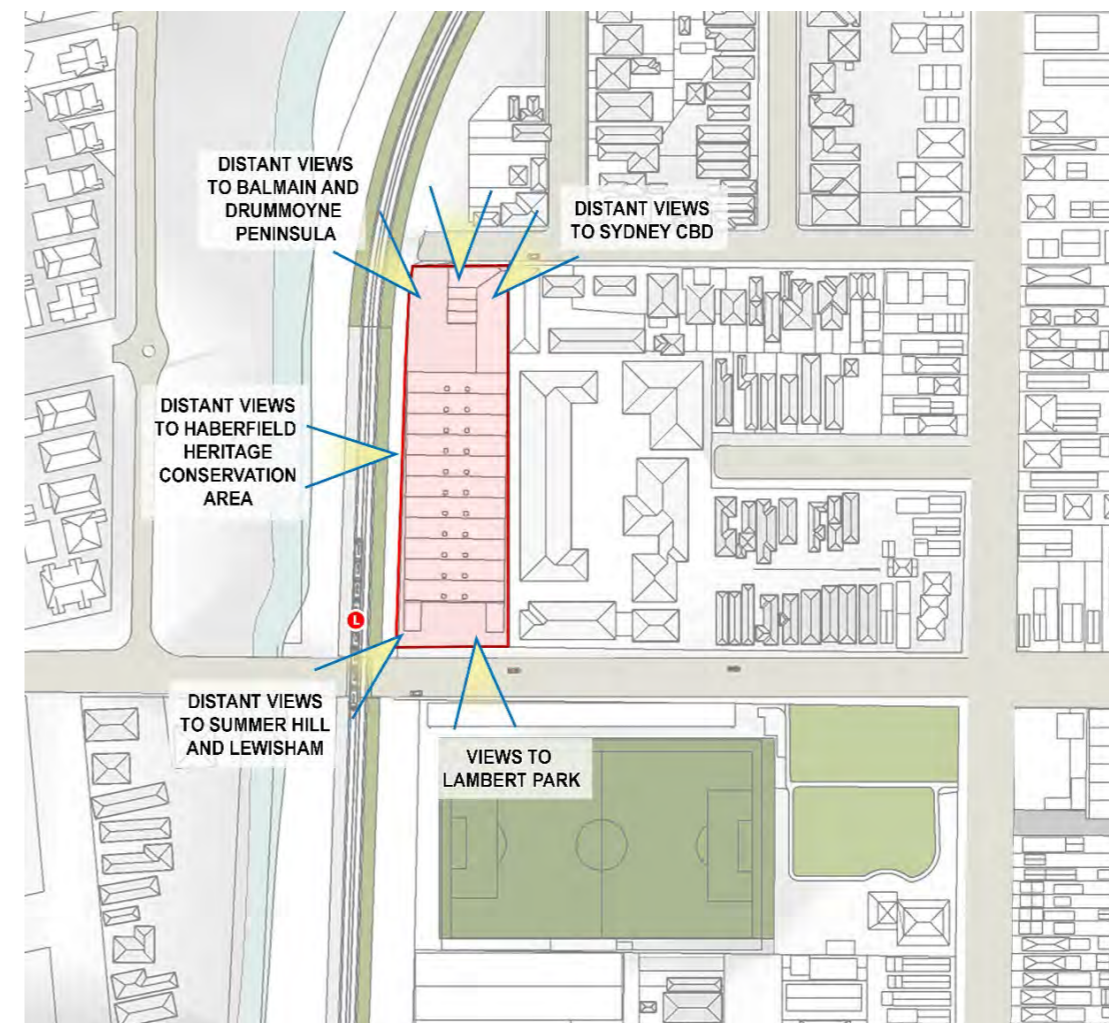


Figure 6.8: Views

6.7 Flood Impact

The site is located within the Hawthorne Canal Catchment.

A Flood Plain Risk Management Study prepared by Cardno in November 2017 identified the site to be partially within the low flood risk precinct, below the 100 year ARI (average recurrence interval) flood event and is not subject to a high hydraulic hazard. The site remains largely unaffected by overland flows except within the northern and southern sides of the site, adjacent to Walter Street and Marion Street.

The majority of flooding within the study area catchment is characterised by both major creek flooding and overland flow. The critical storm duration for the 5 and 100 year ARI events is between 15 minutes and 2 hours across the catchment, with the PMF (probable maximum flood) ranges from 15-45 minutes throughout most of the catchment.

Based on this study, acceptable flood planning levels are to be set at the minimum of:

- RL 4.65 for the 1 in 100 year flood event/ occurrence.
- The second floor to be set for the Probable Maximum Flood (PMF) level of minimum RL 5.0 – which will be considered as the safe refuge area.

The proposed development's:

- Ground Floor Level is set at RL 4.65.
- Level 2 is set at RL 9.15.

There are two flow paths that link Marion and Walter Street. The eastern flow path along the eastern boundary is 1.7m wide and the western flow path on the light rail corridor is approximately 5.4m wide.

Future development should not interfere with these existing flow paths. Access driveways should omit all flood flows from entering the property by raising the driveway crest to RL 4.65 AHD.

A Council stormwater drain is additionally located at the western end of Walter Street.

Figure 6.9a: Flood Constraints Map (1 year flood constraint)

Figure 6.9b: Flood Constraint Map (PMF flood constraint)

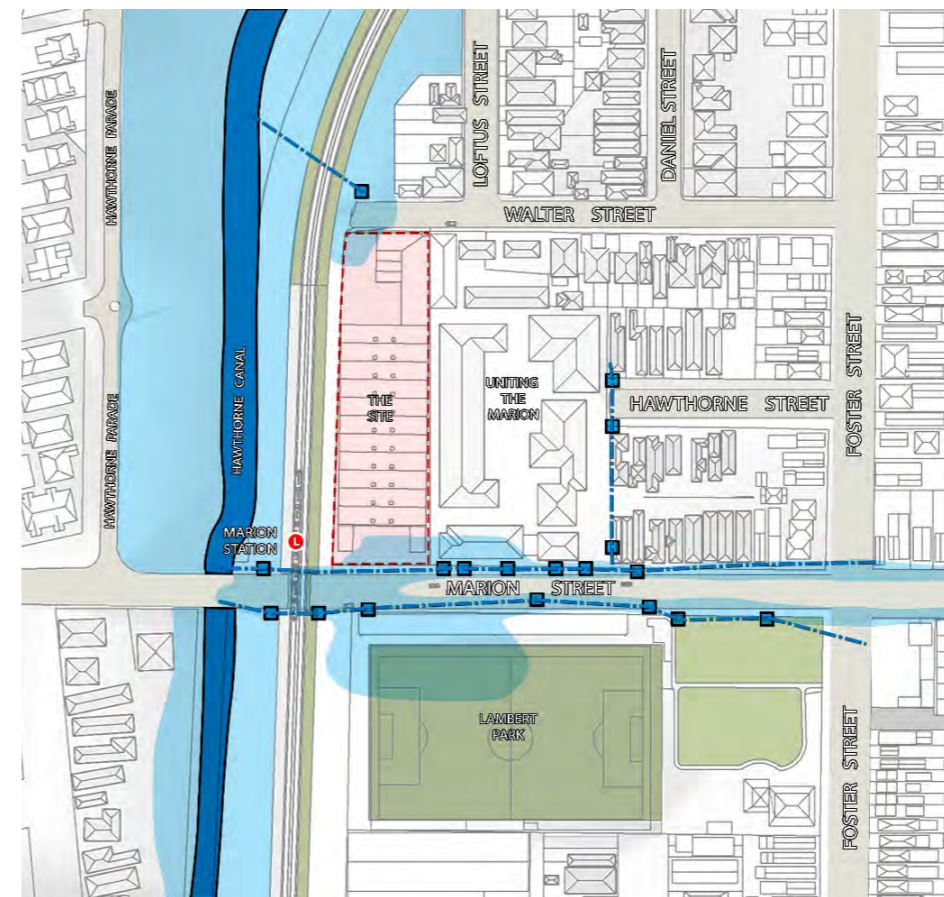


Figure 6.9a:
Flood Constraints Map (1 year
flood constraint) (source: FJT)

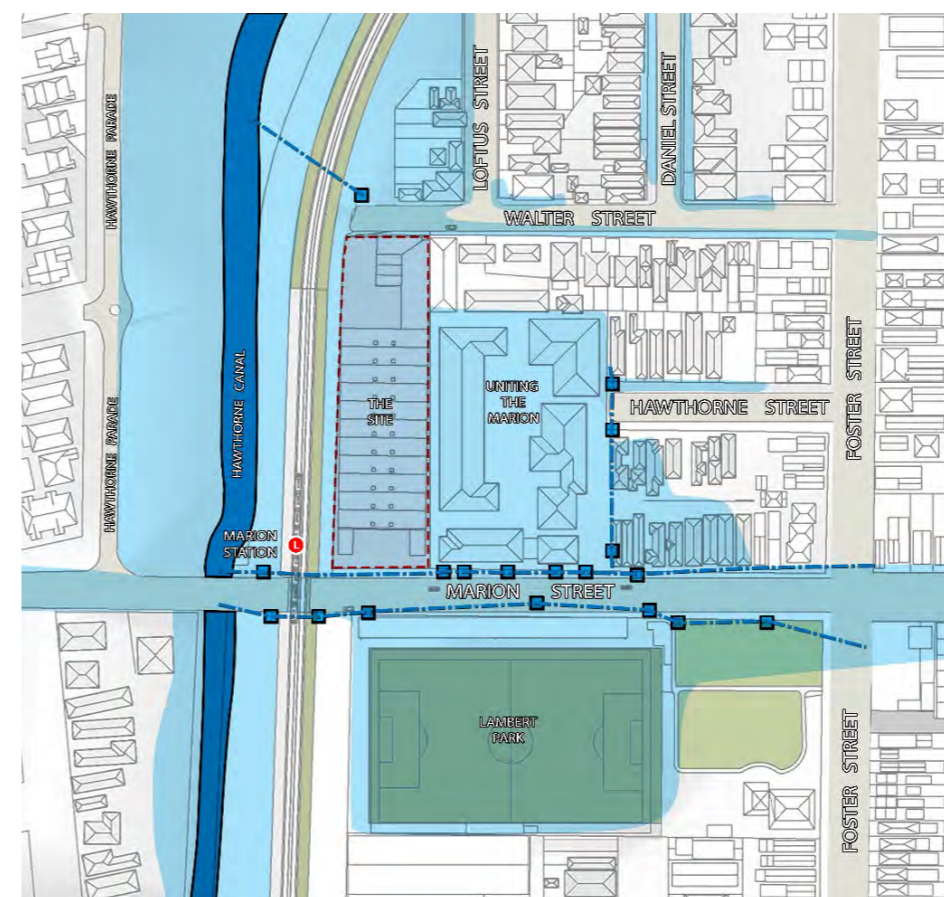


Figure 6.9b:
Flood Constraint Map (PMF
flood constraint) (source: FJT)

6.8 Surrounding Land Uses

Land uses within the immediate vicinity of the site are predominantly residential with pockets of existing and former light industrial uses.

6.8.1 Residential

The pattern of development within the immediate neighbourhood precinct of 245 Marion Street (between Hawthorne Canal and Foster Street) comprises small residential allotments that predominantly align in a north-south direction, with local streets running in an east-west direction. Dwellings within this precinct are single and two storeys in height.

6.8.2 Industrial

Industrial sites located within this predominantly residential precinct on large allotments comprise the:

- Subject site of 245 Marion Street.
- Adjacent site directly to the east of 237 Marion Street, which has been redeveloped from its industrial use since 1984 as a 130 bed seniors living/ aged care facility.
- Large industrial land of 3 Lords Road, south of Lambert Park – subject to a Planning Proposal for redevelopment.

The sites are currently zoned IN2 Light Industrial under *Leichhardt Local Environmental Plan 2013*.

Figure 6.10: Surrounding Residential and Industrial Land Uses

6.9 Surrounding Streetscapes and Neighbourhood Character

The site has frontages to both Marion Street and Walter Street. The site is located between Marion Street and Walter Street.

6.9.1 Marion Street East

Marion Street is a 20m wide classified local road with a 12m wide carriageway and 4m wide footpaths along both sides of the street. The street extends from Johnston Street, Annandale (to the east) to Ramsay Street, Haberfield (to the west), encompasses Leichhardt Market Place and traverses the Leichhardt commercial precinct at Norton Street.

Northern side

Along the northern side of Marion Street:

- To the east of the site, at 237 Marion Street, is the 2-3 storey Uniting Church seniors' housing development known as The Marion. This site is zoned IN2 Light Industrial but was redeveloped in 1984 for higher density residential land use. This development is setback approximately 1m from its front boundary to Marion Street.
- To the east of The Marion are traditional single storey detached dwellings with small setbacks to the street. Individual stands of trees are sited along this side of the street.

There are no street trees at the site's frontage to Marion Street with a scattering of trees along the northern side of Marion Street.

Figures 6.11a & b: Views of Northern Side of Marion Street – to the East

Southern side

Along the southern side of Marion Street, directly south of the site, is Lambert Park. The park extends from the railway corridor (to the west) to Foster Street (to the east).

A wall with grandstand, approximately 100m long and 3-4m high, is sited along the northern boundary of the Park fronting Marion Street. This element is not a contributory to the streetscape and provides an unattractive visual barrier to the Park. A few individual shrubs are located on the grass verge of the street.

Figure 6.12a & b: Views of Southern Side of Marion Street – to the East and West



Figure 6.10: Surrounding Residential and Industrial Land Uses (source: Google Maps)



Figure 6.11a: View of Northern Side of Marion Street – to the East



Figure 6.11b: View of Northern Side of Marion Street – from the East



Figure 6.12a: View of Southern Side of Marion Street – to the East (Photos – source: A.Thomas)



Figure 6.12b: View of Southern Side of Marion Street – to the West

6.9.2 Marion Street West

Along the northern side of Marion Street and directly west of the site is the light rail corridor. The rail line is elevated on an embankment approximately 5.5m above Marion Street with a railway bridge crossing Marion Street. Entrance to Marion Station from Marion Street is located to the west of the bridge.

To the west of the rail corridor is the Greenway, a pedestrian and cycleway along the Hawthorne Canal. Mature trees grow within these corridors, providing a visual screen of the site from the west.

West of the Greenway and rail corridor is the Haberfield Heritage Conservation Area. The pattern of development/ fine grain of the area on the:

- Northern side of Marion Street, to the west and north-west of the site – are detached houses on allotments approximately 600-750m².
- Southern side of Marion Street, to the south-west of the site – are dwellings on smaller allotments with frontages approximately 10m wide.

Figures 6.13a & b: Views of Northern Side of Marion Street – to the West

6.9.3 Walter Street

Walter Street is a 15m local street with a 10m wide carriageway, 2.5m wide footpaths along both sides of the street incorporating a 1.5m wide concrete path and a grassed verge. To the west, the street terminates at the railway corridor. To the east, the street accesses Foster Street (a north-south street). On-street parking is permitted on both sides of the street.

The streetscape at Walter Street comprises predominantly single and two storey detached dwellings on small allotments – as part of the low density West Leichhardt Neighbourhood precinct. The street has a scattering of tree or shrub planting with landscaping located within the front setback of properties contributing to the vegetated streetscape.

On the northern side of the site at Walter Street,:

- Adjacent to the site to the east, is a single storey building for industrial or business purposes (32 Walter Street). The building sited on the street boundary has nil setback to the street boundary.
- Further east, and north of the age care facility, are 2 storey townhouse developments (24-30 Walter Street). The development is generally set back approximately 3m from the street boundary.
- Directly north is the side façade of a single storey dwelling and its rear yard.
- To the west is the vegetated light rail corridor.

Figure 6.14a & b: Views of Southern Side of Walter Street

6.10 Existing Visual Character

6.10.1 View to site from the south-east – at Marion Street

Figure 6.15: View to the Site from the south-east – at Marion Street

6.10.2 View to site from south-west – at Marion Street

Figure 6.16a: View to Site from south-west – at Marion Street

Figure 6.16b: View to Site from south-west (at a distance) – at Marion Street



Figure 6.13a:
View of Northern Side of Marion Street – to the West to railway bridge



Figure 6.13b:
View of Northern Side of Marion Street – from the West to railway bridge and Marion light rail station



Figure 6.14a:
View of Southern Side of Walter Street (adjacent to the Site)



Figure 6.14b:
View of Southern Side of Walter Street



Figure 6.15:
View to the Site from the south-east – at Marion Street



Figure 6.16a:
View to Site from south-west – at Marion Street



Figure 6.16b: View to Site from south-west (at a distance) – at Marion Street

6.10.3 View to site from north-east – at Walter Street

Figure 6.17a: View to Walter Street and the Site

Figure 6.17b: View from Walter Street, from the east – to the Site

6.10.4 View to site from west – at Hawthorne Parade

Figure 6.18: View to Site from Hawthorne Parade (to the south)

6.10.5 View to site from north-west – at Hawthorne Parade

Figure 6.19: View to Site from Corner of Hawthorne Parade and Darragh Lane



Figure 6.17a: View to Walter Street and the Site



Figure 6.17b: View from Walter Street, from the east – to the Site



Figure 6.18: View to Site from Hawthorne Parade



Figure 6.19: View to Site from Corner of Hawthorne Parade and Darragh Lane
(Photos – source: A. Thomas)

7.0 URBAN DESIGN ANALYSIS

7.1 Planning Rationale

The site has an isolated light industrial land use within an existing low density residential precinct in the Inner West.

The Inner West is experiencing high residential demand due to its proximity to the Sydney CBD and its employment, educational and recreational opportunities, as well as with the redevelopment of the former freight rail corridor for light rail passenger services lining the Inner West to the Sydney CBD.

The site, the size of the allotment and its siting as a transit-oriented development has the potential for urban renewal.

The adjoining site to its east (formerly with light industrial uses) has been redeveloped into a seniors housing development.

This development presents an opportunity to promote transit-oriented development. The site meets the criteria as a transit-oriented development, being:

- Adjacent to the proposed light rail extension that links the Inner West suburbs of Leichhardt, Rozelle Bay, Glebe, Sydney Fish Market, The Star, Pyrmont and Darling Harbour;
- Along 5 Inner West bus routes to local centres and the Sydney CBD; and
- In close proximity to retail and community facilities at Leichhardt Town Centre.

The site, being close to transport networks, employment opportunities and existing social infrastructure, presents the opportunity for utilising the land for urban consolidation to provide for more compact higher density development. It will enable the revitalisation and regeneration of this under-utilised site, with an isolated light industrial use in a predominantly residential precinct.

This proposed development will provide social sustainability to widen the choice of housing typologies with the beneficial potential to assist in affordability and improved entry into the much in demand housing market of the Inner West. Additionally, the development will provide housing opportunities for an empty nester/ retirement age group who have lived and wish to remain in this neighbourhood, to be in close proximity to transport routes and services.

The viability and success of well-designed higher density developments around transport nodes are often limited by the fragmented nature of land tenure and the size of available allotments. This site, of 5,210m², provides a viable opportunity for a higher density, whilst allowing its traditional neighbourhood to be preserved.

Locating multi-family housing or compact mixed-use development around mass transit access points allows residents, workers, and shoppers to travel to and from many destinations without a car. The proximity and access of this proposed residential development to public transport will reduce car dependency, particularly for the daily work to home commute.

Creating a development project around a planned or existing transit line is one of the best ways to increase ridership. It will provide a sustainable initiative to change travel habits from private vehicle use to public transport. For transit agencies, concentrated clusters of housing near stops and stations can mean a critical mass of riders and revenue that will contribute to the viability and encourage the use of this proposed transport mode.

The development is environmentally sustainable, additionally close to retail, services and recreational facilities. The development can offer reductions in greenhouse gas emissions by having less car-based trips and reduce traffic congestion.

7.2 Site Attributes

The site is well located with attributes suitable for employment generating land uses (to include commercial, urban services and local retail) and higher density residential, as the site has the advantages of:

- Proximity to good public transport:
 - Of a light rail station and corridor that connects to neighbourhood precincts and the Sydney CBD.
 - Along the route of bus services to surrounding precincts.
- Good vehicular connectivity to key arterial road networks of City West Link and Parramatta Road.
- Good pedestrian connectivity:
 - Via the open space corridor of Hawthorne Canal to the Sydney foreshore areas.
 - Via Marion Street to surrounding retail, commercial and entertainment facilities.
- Proximity to key retail, commercial and entertainment facilities.
- A consolidated site of 5,500m².
- Bounded by 2 street frontages - Marion Street and Walter Street, with potential access from the development to these streets.
- Proximity to a large playing field (Lambert Park) and open space corridor adjacent to Hawthorne Canal.
- Being buffered from the existing low density residential neighbourhood by:
 - A seniors' residential development to the east.
 - Marion Street and Lambert Park to the south.
 - Light rail corridor, Hawthorne Canal and open space corridor of "The Greenway" to the west.
 - Walter Street cul-de-sac and portion of the vegetated rail corridor open space to the north.
- Offering 360° views from upper levels of the development.
- Providing greater housing choices and housing typologies.

7.3 Site Opportunities

The site presents key design opportunities for the development and its neighbourhood to:

- Redevelop a moderately large site (under one ownership) for a transit-orientated mix use development, strategically located:
 - Adjacent to a public light rail stop.
 - In close proximity to city and neighbourhood bus routes.
 - In close proximity to a large recreation field and passive park of Lambert Park.
 - Under 400m to Leichhardt Market Place.
 - Under 500m to a local public primary school.
- Retain employment (particularly the existing automotive repair use) and urban services on the site.
- Improve pedestrian access for residential areas north and north-east to Marion light rail station.
- Maintain the view corridor along Hawthorne Street (though already compromised by the 3 storey development) to open sky.

7.4 Site Constraints

The site has the following constraints/ challenges to redevelopment for higher density, with:

- Juxtaposition of urban forms of greater mass and height within low density residential forms.
- Impact on residential amenity of existing neighbourhood.
- Overshadowing of surrounding developments and recreational open spaces (such as Lambert Park).
- Impact of increased traffic on surrounding streets.
- Flood prone land and drainage constraints to development.

7.5 Historical Development of the Metropolitan Goods Line and Inner West Light Rail Line

7.5.1 Description

The Metropolitan Goods Line ran from the Wardell Road junction at Dulwich Hill to Darling Island. The line, of 4.1 km in length, opened for service on 23 January 1922 and was closed on 22 January 1996. In its heyday, the double track goods line had up to 40 train movements a day. By the time the line was closed, it saw only weekly use to the Edwin Davey Flour Mill (adjacent to the Metropolitan Light Rail's Wentworth Park station).

The goods line passed through the suburbs of Dulwich Hill, Summer Hill, Lewisham, Haberfield, Leichhardt, Annandale, Glebe, Pyrmont, Darling Island, under Pyrmont Bridge Road at Pyrmont Bridge to enter Darling Harbour and continue through to rejoin the main lines near Mortuary Station. In its heyday, the goods line was the main route for the transport of coal, wheat and other goods into and from Rozelle Goods Yard.

7.5.2 History

The Darling Island goods line was part of the first railway opened in NSW in 1855, with the current corridor corresponding with that purchased from the Harris family in 1853.

By 1900, the Sydney metropolitan railway network, through the combined, and conflicting, demands of the suburban and country passenger services and the movements of freight trains, was fast reaching congestion. Segregated running periods and special timetables were only short-term solutions and did not address the differing traffic requirements. This resulted in a separate rail system built for freight trains to move independently of the passenger services but could link into the four main lines (north, west, south and Illawarra) at specific locations.

Work began c. 1910 on the goods line from Rozelle to the northern end of Darling Harbour, which opened for traffic on 23 January 1922. The goods line provided a continuous loop connection through Central Station Yard, Darling Harbour Goods Yard and the Pyrmont wharves, with connections to Rozelle Yard, White Bay and Glebe Island.

The completion of the goods line was directly associated with the Sydney Harbour Trust's completion of the Pyrmont (Jones Bay) wharves, considered to be the most up-to-date and advanced in the port, with rail lines running along each of the wharves. In this period, Sydney Harbour was the main port for NSW and the goods line provided a direct connection between rural Australia, growing wheat and wool and mining coal, and the ships carrying the goods to export markets. Imported goods arriving on the docks were back-loaded onto the empty trains for distribution around the state.

During World War II, the goods line was extremely busy with troop and ordinance trains making up the majority of the traffic, heading towards Darling Island. The Long Cove siding (adjacent to Hawthorne Canal) provided entry to and from the Australian Army Ordinance Stores located between the rail line and the Canal.

7.5.3 Current use

In the 1980s, the Metropolitan Goods Line from the Balmain Road signal box to Darling Harbour (which was no longer in regular use) was closed to allow the construction of the Sydney Casino.

The goods line lay dormant for a time until the 1990s when the corridor was reused by a light rail network that ran from Central Station, via Darling Harbour and Pyrmont, connecting to Wentworth Park, opening in 1997. The light rail network was further extended to Lilyfield in August 2000.

During the 2000s, the section of the heavy rail goods line between Dulwich Hill and Rozelle saw a considerable decline in traffic. Rozelle goods yard was used intermittently for the storage of disused railway wagons and passenger cars. In 2010, the NSW Government announced the utilisation of the Rozelle freight corridor to extend the light rail from Lilyfield to Dulwich Hill. The Inner West light rail network, which extends from Central Station to Dulwich Hill, was completed in March 2014.

7.5.4 Development of industrial sites along the Goods Rail Line

The siting of the railway along the edge of Darling Harbour strongly influenced the development of Pyrmont and Ultimo. Large stores and industrial buildings built there after the 1870s gave these precincts historically, its industrial, rather than residential, flavour.

As an outcome of the Metropolitan Goods Line, large sites along the line in the Inner West were historically developed as goods yards for wool and grain stores, engineering works and other industries. These sites were historically located within the context of small residential allotments, consisting of single, and later, two storey dwellings.

The specific built form developed on these sites along the goods rail corridor were warehouse buildings with large building footprints. A number of these buildings had heights of up to 6-8 storeys, several with silos of up to 10 storeys. Examples of this built typology are still evident in the former flour mill sites at Summer Hill and Dulwich Hill.

By the 1960s, many of the nearby wool stores and other port functions were moving out of Sydney as road transport became a less expensive mode than rail for transshipment of goods. This resulted in the function of the heavy goods line decreasing significantly. By 2009, with the mill at Summer Hill relocated to Maldon in the Southern Highlands, all traffic on the line ceased.

Figures 7.1: Industrial Sites along the Light Rail (Former Goods Rail) Line



Figure 7.1b: Industrial Sites – Leichhardt to Summer Hill (source: A.Thomas)



Figure 7.1a: Industrial Sites – Ultimo to Leichhardt (source: A.Thomas)



Figure 7.1c: Industrial Sites – Summer Hill to Dulwich Hill (source: A.Thomas)

7.6 Industrial Typology along the Goods Rail Line

The Metropolitan Goods Rail Line (current Inner West light rail line) left a legacy of industrial sites with industrial building typologies comprising large warehouse buildings of up to 8 storeys in height, and within some sites, juxtaposed against taller, slender tower forms of silo buildings of up to 13 storeys in height. These buildings were dominant forms along the heavy goods line.

A schedule of historic industrial buildings along the rail corridor is as follows:

| Location | No. of storeys | |
|-----------------------------|-------------------------|------------|
| | Warehouse buildings | Silos |
| A. Summer Hill Flour Mill | 8 (6 + 2 storey attic) | 13 |
| B. Waratah Mills | 7 (6 + 1 storey attic) | 11 |
| C. Glebe Island & White Bay | 8 (White Bay – up to 6) | 13 (38.4m) |
| D. Cragos Flour Mill | 5 | 12 |

These warehouse buildings and silos had important historical associations, architectural and engineering values. Sited adjacent to transport (railway) corridors, these industrial buildings were impressive and prominent in their immediate landscape, with landmark qualities, often visible from local and surrounding suburbs.

Industrial sites along the former goods line and their historical industrial typology are as follows:

7.6.1 Allied Flour Mill, Summer Hill (A)

The Summer Hill (Allied) Flour Mill site is located at Edward Street, Summer Hill, along the north-western side of the Goods Rail Line and adjacent to Lewisham West Light Rail Station (2 stops south of Marion Station).

Industrial buildings historically on the site comprise an 8 storey flour mill (built c.1922) and 13 storey silo structures (added in the 1950s).

Figure 7.2: Summer Hill and Lewisham Industrial Sites and Buildings

7.6.2 Waratah Flour Mill, Dulwich Hill (B)

Waratah Flour Mill site is located at Terry Road along the western side of the Goods Rail Line and adjacent to Waratah Mills Light Rail Station (3 stops south of Marion Station).

Industrial buildings historically on the site comprise a 6 storey plus attic warehouse and a 11 storey high silo structure.

Figure 7.3a: Waratah Flour Mill Industrial Site and Buildings

7.6.3 Glebe Island and White Bay industrial sites, Glebe (C)

Glebe Island grain terminal is a key site in the development of bulk wheat storage export industry in Australia, with its industrial buildings demonstrating the evolution of this industrial process. The silos are the most visible elements of the site's former use and form a powerful landmark.

The initial silos were 9.5m in diameter and 33m in height. The silo complex was extended in 1975 to 30 cylindrical concrete silos, 38.4m high. Warehouse buildings (demolished) adjacent to these silos were up to 8 storeys in height.

The site ceased operation as a grain store in 1984 and part of the complex was modified for cement storage in 1994. The disused silos at Glebe Island were demolished in 2000 to allow for more productive use of the site.

Figure 7.4: Glebe Island Industrial Site and Buildings



Figure 7.2a: Summer Hill and Lewisham Industrial Sites (source: A.Thomas)



Figure 7.2b: Lewisham Industrial Buildings



Figure 7.2c: Allied Flour Mill Buildings, Summer Hill



Figure 7.3a: Waratah Flour Mill Industrial Site



Figure 7.3b: Waratah Flour Mill Buildings

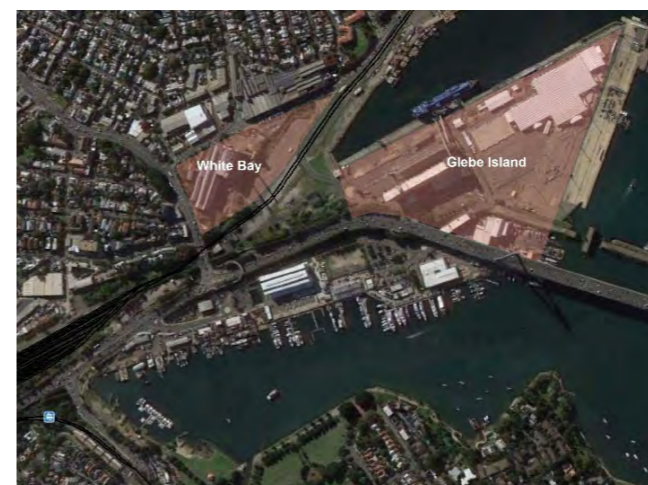


Figure 7.4b: Glebe Island Buildings (source: Website)

Figure 7.4a: Glebe Island Industrial Site (source: A.Thomas)

7.6.4 Cragos Flour Mill, Newtown

Cragos Flour Mill/ Newtown Silos, located on the southern side of the heavy rail line, south of Newtown railway station, represents the late 19th century and early 20th century phase in milling, characterised by the establishment of large city mills.

The complex comprises warehouse buildings (up to 5 storeys in height) and concrete silos (rising up to 12 storeys in height).

Figure 7.5a: Cragos Flour Mill Industrial Site and Buildings

7.7 Urban Development Precedents along the Light Rail Corridor

The light rail line has facilitated change in the redevelopment of sites, particularly industrial, along and close to this route for residential or mixed-use residential purposes.

A number of these historic built forms have been retained, adaptively reused for residential uses and integrated with contemporary residential forms of similar bulk and height – as evidenced in the Summer Hill Flour Mill, Waratah Mills, Cragos Flour Mill and the Lewisham Estate residential developments, all on former industrial sites along the heavy rail line.

These developments are on large industrial sites, sited historically within the context of low density residential precincts with a “fine-grained” pattern of development of small allotments. Redevelopment of these sites have not altered the form of large buildings historically developed on these sites.

Figures 7.6: Former Industrial Sites Redeveloped into Mix Use and Residential Developments



Figure 7.5a: Cragos Flour Mill Industrial Site



Figure 7.5b: Cragos Flour Mill Buildings (source: Website)



Figure 7.6a: Summer Hill Industrial Site Redeveloped



Figure 7.6b: Waratah Mill Industrial Site Redeveloped



Figure 7.6c: Lewisham Industrial Site Redeveloped (source: Website)



Figure 7.6c: Lewisham Industrial Site Redeveloped (source: Website)

8.0 DEVELOPMENT PROPOSAL

8.1 Planning Proposal

The Planning Proposal seeks to rezone and redevelop this subject site of approximately 5,210m², currently zoned IN2 Light Industrial with maximum permissible FSR of 1:1 under Leichhardt LEP 2013, to:

- Retain its IN2 Light Industrial zone, whilst enabling other employment uses such as child-care and health service facilities, and incorporating residential uses, as part of a mixed-use development.
- Maximum permissible FSR of 3.0:1, comprising:
 - Employment uses – with FSR 1:1; and
 - Residential – with FSR 2:1.
- Maximum permissible building height – 8 storeys with roof garden.

8.2 Objectives of the Planning Proposal

The objectives of the Planning Proposal for the rezoning of the subject land to higher density mixed use development comprising employment and residential uses are to:

- Facilitate urban renewal with a new transit-oriented development adjacent to light rail infrastructure by transforming an underutilised industrial zone for employment and residential uses – consistent with the State government strategic planning objectives and policies.
- Retain existing urban services on the site to serve the needs of the local community.
- Provide additional business (commercial, retail and urban services) within the development, to benefit from the development's proximity to Marion light rail station.
- Contribute to the supply of housing to meet market demand for additional housing choices as well as affordable housing.
- Provide a density of development that is appropriate to the site's proximity to public transport, environmental capacity and is compatible with local land uses and urban densities.
- Provide a scale of development that is compatible with the urban context and local building forms adjacent to rail infrastructure.
- Deliver a design that meets the SEPP 65 Design Quality Principles, that achieves optimum residential amenity for the development and respects the amenity of neighbouring properties and public spaces.
- Deliver an ecologically sustainable development.
- Provide an accessible pedestrian walkway, with 24 hour access between Walter Street and Marion Street, to service the development as well as the residential areas to the north and north-east.

8.3 Concept Design

8.3.1 Development description

The Concept Design consists of an 8 storey development with rooftop terraces and 3 basement levels, with:

- **Employment** uses – for urban services, commercial and retail at street/ Ground Floor Level (L1). These uses are to have active frontages to Marion Street and the internal laneway, with entries from these streets.
- **Residential** – comprising studio and 1-3+ bedroom apartments on upper levels (L2-8).
- **Rooftop of buildings** – as landscaped communal open space.
- **Basement** – for:
 - Urban services (such as an automotive service centre).
 - Car and cycle parking for the residences and business occupants.
 - Ancillary storage – for residences.

8.3.2 Site layout

The concept development is linear in built form and footprint comprising 2 buildings, located at the northern and southern portions of the site. The buildings are located approximately 25m apart, with the separation width aligning with Hawthorne Street, which runs in an east-west direction, located east of the site.

The proposed buildings are sited according to passive ecological design principles, with:

- Alignment of the buildings in a north-south direction to optimise solar access to the development.
- Setbacks between the subject development and the adjacent Age Care Facility for solar access and privacy.
- Setbacks to residences from the western boundary and the light rail corridor.
- A row of canopied trees along the eastern boundary for privacy and microclimate control to residences.
- Slender building forms at higher level with up to 25m separation between the buildings.

8.3.3 Development density

The proposed concept development is sited on an allotment 5,210m² in area with proposed uses comprising:

Employment uses:

| | Building area | FSR |
|---|----------------------------|--------------|
| ▪ Urban services/ light industrial – at Basement Levels | Min. 3,000 m ² | |
| ▪ Urban services – at Ground Floor Level (L1) | Min. 200 m ² | |
| ▪ Commercial (business and office premises, child care or health services facilities) – at: | Max. 2,000 m ² | |
| – Ground Floor Level (L1) | | |
| – Levels 2 and 3 fronting Marion Street | | |
| ▪ Retail, restaurants or cafes at: | Max. 250 m ² | |
| – Ground Floor Level (L1) near the Marion Station | | |
| Total: | 5,210 m² | 1 : 1 |

Residential uses:

| | Building area | FSR |
|--|-----------------------------|------------------|
| ▪ Residential – at Levels 2-8. | 10,420 m ² | |
| Total: | 10,420 m² | 2 : 1 |
| Total development density: | 15,630 m² | 3 : 1 |
| Total development density above ground level (visible): | 12,630 m² | 2.425 : 1 |

The proposed concept development density is consistent with densities on development sites along rail corridors. The “visible” development density consistent with densities on smaller development sites along the Inner West light rail and Parramatta Road corridors.

CONCEPT DESIGN – FLOOR PLANS

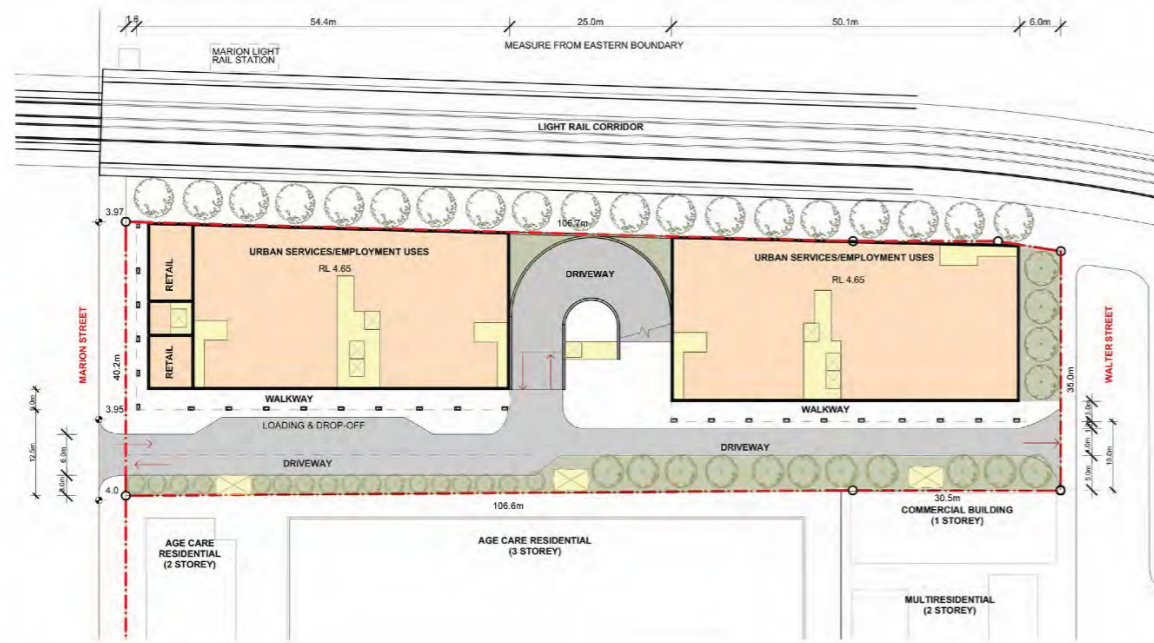


Figure 8.1: Ground Floor Plan (L1)

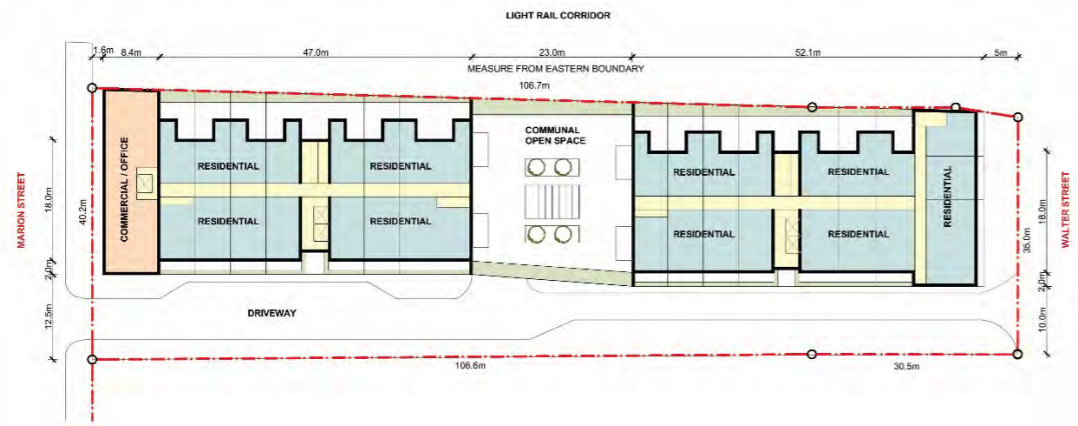


Figure 8.2: Level 2 Floor Plan

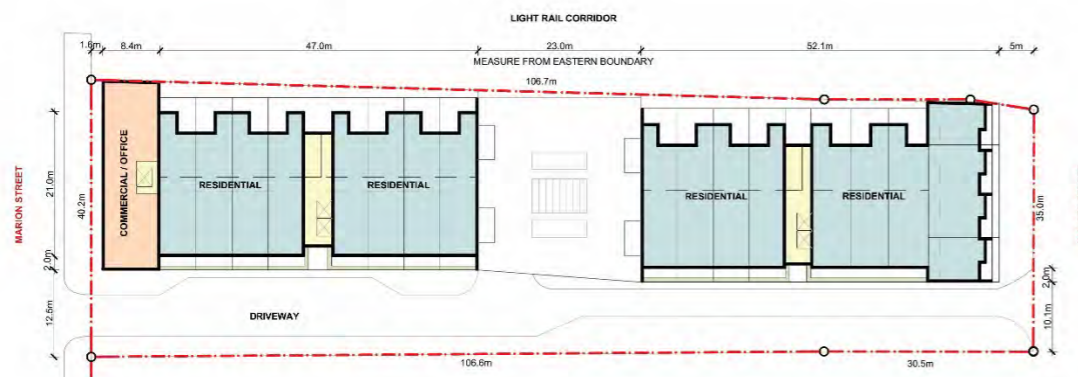


Figure 8.3: Level 3 Floor Plan

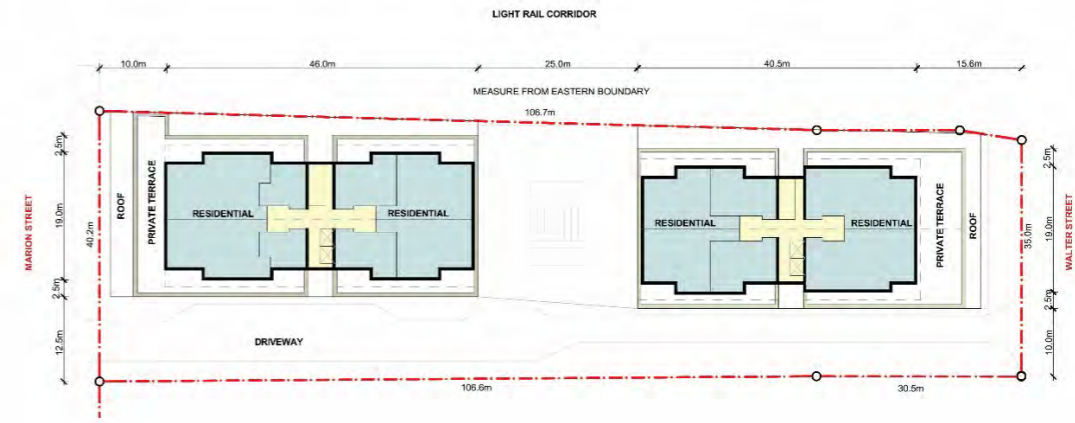


Figure 8.4: Level 4 Floor Plan

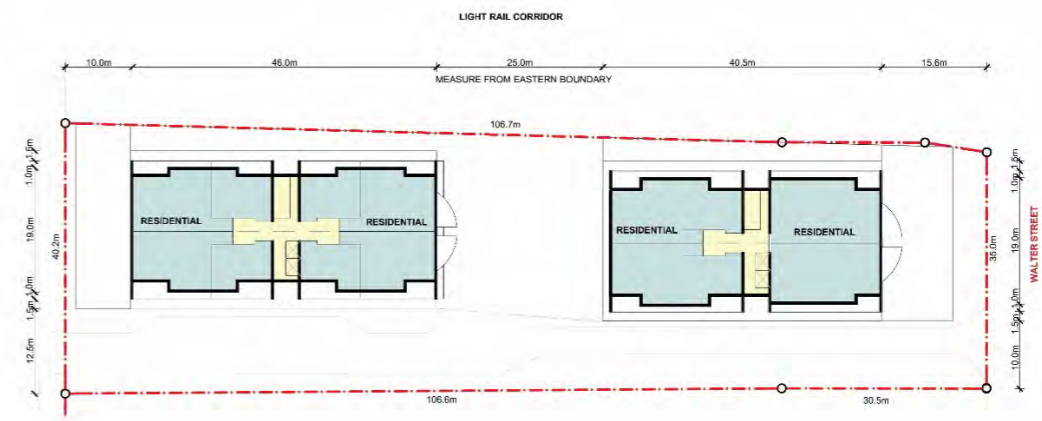


Figure 8.5: Levels 5-7 Floor Plans

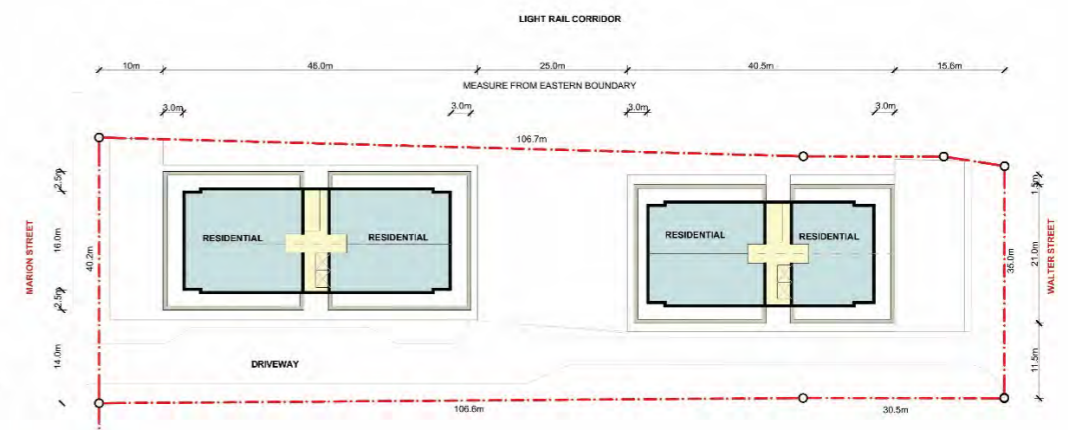


Figure 8.6: Level 8 Floor Plan

CONCEPT DESIGN – BASEMENT PLANS



Figure 8.7: Basement 1 Floor Plan

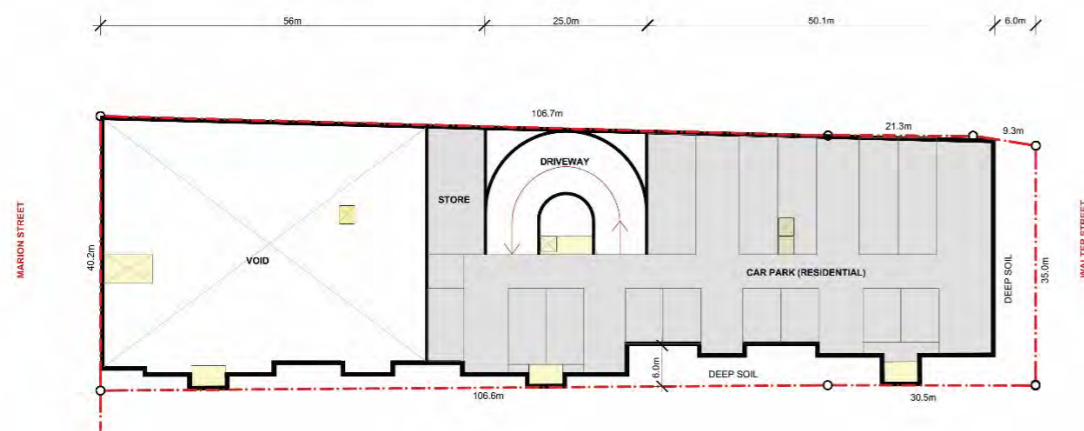


Figure 8.8: Basement 2 Floor Plan



Figure 8.9: Basement 3 Floor Plan

CONCEPT DESIGN – ELEVATIONS



Figure 8.10: East Elevation



Figure 8.11: West Elevation



Figure 8.12:
North Elevation – to Walter Street



Figure 8.13:
South Elevation – to Marion Street

8.3.4 Development height

The buildings modulate in height (rising to 8 storeys) and building form, with:

- Low building heights in the form of a podium (3 storeys) fronting Marion and Walter Streets.
- Slimmer residential towers (5 storeys) above the podium, setback from the podium footprint, located at central portion of the site, with 25m separation between the towers.
- The uppermost residential storey (L8) of each residential tower additionally setback from the tower footprint, to create a continuous landscape terrace for these uppermost residences.
- Rooftop landscaped open space above the residential towers and on the podium roof.

The proposed development height:

- Is consistent with the height and form of developments on former industrial sites along the Inner West light rail corridor.
- Maintains solar amenity to properties within the Haberfield Conservation Area and the communal open space of the adjacent Age Care Facility.

8.3.5 Setbacks

The development has setbacks from its site boundaries at:

Northern boundary (to Walter Street), of:

- 5m to the podium (L1-3).
- 15.6m to the residential tower (L4-7), with further setback at Level 8.

Southern boundary (to Marion Street), of:

- 1.5-1.6m to the podium (L1-3).
- 10m to the residential tower (L4-7), with further setback at Level 8.

Eastern boundary (adjoining the Aged Care Facility):

- At **Southern Building** (fronting Marion Street):
 - 12.5m – to the podium (L1-3).
 - 14m – to the balconies of the residential tower, with further setback at Level 8.
- At **Northern Building** (fronting Walter Street):
 - 10m – to the podium (L1-3).
 - 11.5m – to the balconies of the residential tower, with further setback at Level 8.

Western boundary (adjoining the rail corridor), of:

- Nil setback at Ground Floor Level (L1).
- Minimum 3m setback to the podiums (L2-3).
- Minimum 5.5m to the residential towers (L4-7), with further setback at Level 8.

The proposed setbacks:

- Comply with SEPP 65's *Apartment Design Guide* minimum setback requirements for residential amenity.
- Ensure that the setbacks of the proposed development to the street are consistent with developments/dwellings along the street.
- Provide a 3 storey podium urban form that integrates with the surrounding streetscapes of single and 2 storey built forms, with higher residential buildings substantially setback from the street.
- Create an internal laneway and public domain along the eastern side of the site.
- Provide deep soil planting, of canopied trees and landscaping, along the northern and eastern boundaries.

Figure 8.14: Concept Design – Cross Section

Figure 8.15: Concept Design – Long Section

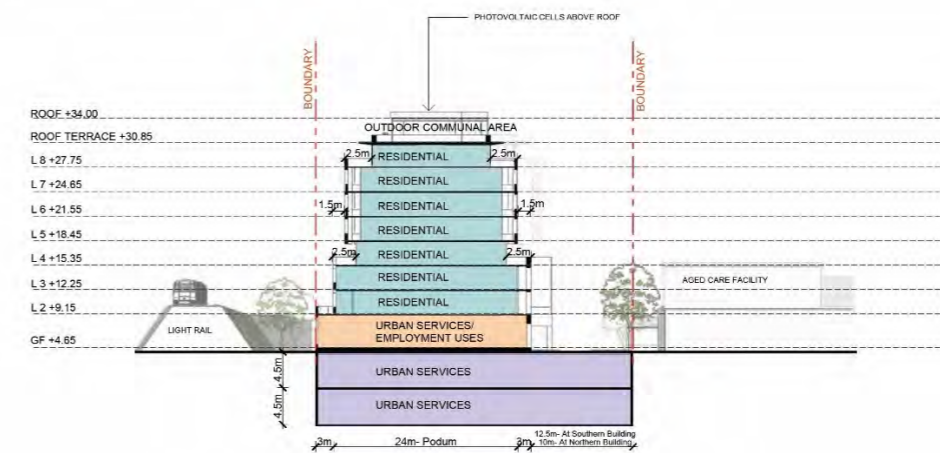


Figure 8.14: Concept Design – Cross Section (source: FJT)

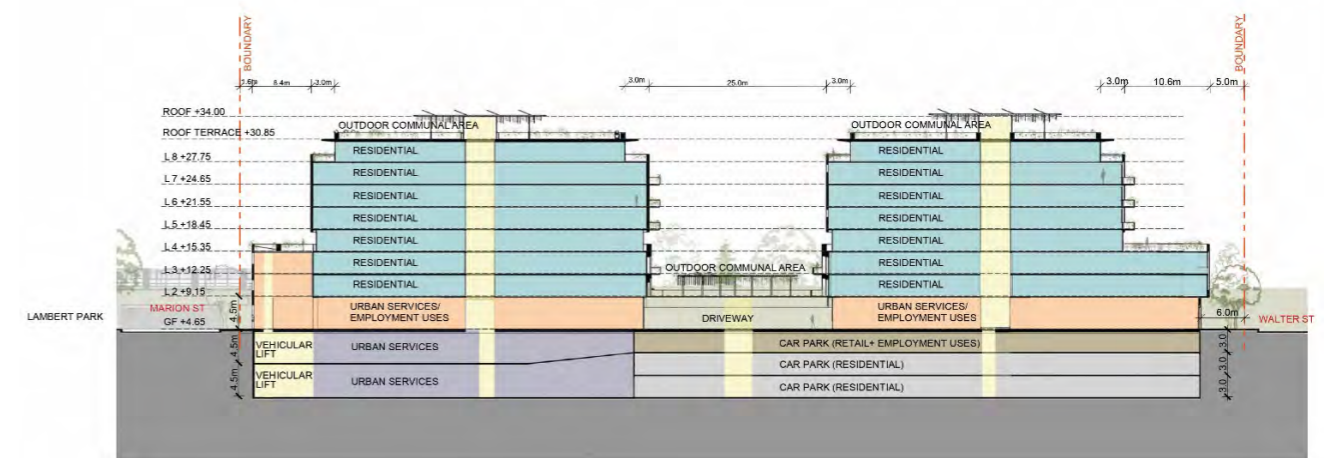


Figure 8.15: Concept Design – Long Section (source: FJT)

8.3.6 Access and movement

The proposed development creates a laneway along the eastern boundary that links Marion Street and Walter Street, providing permeability through site for pedestrians, cyclists and vehicles. Vehicular access through the site is limited to the development's occupants.

Vehicle and cycle access

- Site entry and exit for vehicles and cycles (residential and employment uses) from Marion Street.
- 6m wide dual carriage laneway that leads to an internal circular driveway, located at the mid-point of the site, to basement parking areas.
- Laneway tapers to a 4m wide single carriageway that enables vehicle exit only to Walter Street – to enable ease of entry and exit for vehicles servicing the site and to reduce traffic impacts on the low density residential precinct of West Leichhardt.

Temporary parking and service bay

A temporary parking and service bay is located at the eastern side of the southern building (Southern Building).

Pedestrian access

- Pedestrian site access from Marion Street and Walter Street.
- 3m wide universally accessible covered colonnade borders the northern and eastern shopfronts and entries at Ground Floor Level. The colonnade will be lit at night for safety and security. The walkway will be available for public use, providing a sheltered pathway through the site from the light rail station at Marion Street to the residential precinct at Walter Street.
- On Marion Street – pedestrian access to Ground Level retail and entry to commercial premises above (L2 and 3), to provide active frontages and activate the public domain at the Marion light rail station.
- Entries to commercial, retail and urban services and apartment buildings from the internal laneway – to provide active frontages and passive surveillance to the internal street.

Figure 8.1: Concept Design – Ground Floor Plan

8.3.7 Parking – off-street

Required car and cycle parking for employment and residential uses is over 3 basement levels, predominantly at the northern half of the site, with the southern portion of the site to be used for Automotive Service facilities.

Parking areas for residential and business uses will be separated in clearly identified areas.

Parking numbers required for the proposed uses can be accommodated in compliance with *Leichhardt DCP 2013 – Car Parking* and the *RTA Guide to Traffic Generating Developments*.

Figure 8.7, 8.8 & 8.9: Concept Design – Basement Plans

8.3.8 Public domain and open space

Public domain

The public domain at street/ ground level comprises:

- Landscaped vehicular laneway and sheltered pedestrian walkway that traverses the site, between Marion Street and Walter Street, linking into the existing footpaths of these streets.
- Increased footpath area at Marion Street with covered colonnade to the active retail frontage along the street, which can incorporate café seating.

Communal open space

Communal open space is proposed:

- Within the landscaped setback area at Walter Street – for passive recreation.
- At L1 between the 2 buildings – above the enclosed vehicle driveway to basement parking levels and automotive service centre.
- At roof terraces above the two residential towers.

These spaces are appropriately landscaped to include soft landscaping to provide visual privacy, solar amelioration, microclimate benefits and aesthetic appeal.

The open spaces:

- Enhance the aesthetic character of the development.
- Provide social opportunities for passive recreation and community gardens.
- Incorporates water sensitive urban design measures into the landscape design and operation of the spaces.

Figure 8.16: Communal Garden Landscape Imagery

Figure 8.17: Roof Terraces Landscape Imagery

Private open space

Private open space to residential units are proposed:

- As landscaped terraces – above the podium level (L4) and to residential units on L8.
- On balconies at all levels of the building.

All private open spaces of terraces and balconies will be designed to provide optimum amenity to residences. Residences at the podium levels will be provided with deep terraces or balconies and landscaped along the western side facing the light rail corridor, to provide privacy from the railway.

Figure 8.18: Penthouse Terraces Landscape Imagery

8.3.9 Landscape design

The Landscape Concept Design is to create an attractive and comfortable external environment with quality public domain at ground and street level for the residents and occupants of, and visitors to the development.

Water sensitive urban design measures will be integrated with the development to include:

- Integration of stormwater treatment into the landscape.
- Protection of water quality.
- Reduction of runoff and peak flows.
- Minimisation of drainage infrastructure cost with reduce runoff.



Figure 8.16: Communal Garden Imagery (source: Website)

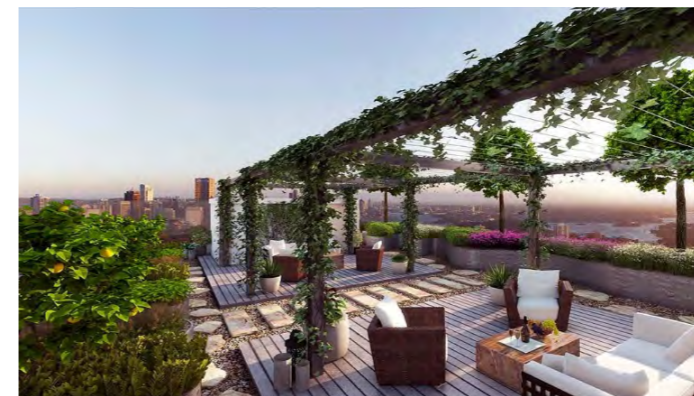


Figure 8.17a: Roof Terrace Imagery (source: Website)



Figure 8.17b: Roof Terrace Imagery



Figure 8.17c: Roof Terrace Imagery (source: Website)



Figure 8.17d: Roof Terrace Imagery (source: Website)



Figure 8.18: Penthouse Terraces Landscape Imagery (source: Website)

Eastern boundary

- A row of large evergreen canopied trees is proposed along the eastern boundary supported by deep soil zones (3m along the southern half of the eastern boundary and up to 5m along the northern half of the boundary).
- Lower shrubs and ground covers under trees.

The landscape will provide:

- Landscape screening between the development, its vehicle laneway and the adjoining property.
- Microclimate control along the driveway surfaces.
- Bioretention for stormwater management strategies.

Northern boundary

- A row of deciduous trees is proposed along the northern boundary, within the setback area, supported by a 6m deep soil zone.
- Landscaped setback area – predominantly turfed with perimeter planting of screen hedges, shrubs and ground covers.

The landscape will provide:

- Landscape screening to residences fronting the street.
- Filtered northern sunlight (in summer) to lower level residences and commercial premises.
- A residential streetscape treatment to Walter Street, sensitively integrating the development into the low density residential precinct to the north.

Podium and roof terraces

- Perimeter planting of low and cascading shrubs to all terraces.
- Landscaping of small trees and shrubs on the roof terraces, augmented with pergolas/ shelters – to provide an attractive outdoor space for residents of all age groups.

Figure 8.1: Concept Design – Ground Floor Plan

8.3.10 Social sustainability

The site is located adjacent to:

- A light rail station providing direct public transport to the Leichhardt Town Centre and the Sydney CBD.
- Bus routes that linking the Inner West to the Sydney CBD.
- The pedestrian and cycle shared path along The Greenway adjacent to Hawthorne Canal directly to the west.

With proximity to the above modes of transport, the site provides the opportunity to create a transit-orientated development that will encourage the use of public transport, cycling and walking, and minimise private vehicle use and ownership.

The development contributes to social sustainability and public benefit by providing:

- A mix of employment and residential uses, whilst retaining the existing urban service of automotive servicing, within the site.
- Convenient retail outlets adjacent to the light rail station.
- An internal laneway through the site for public use, providing convenient access to the light rail stop, with active frontages that are night lit along the pedestrian route to provide safety and security for its users.
- Passive surveillance of the light rail stop and open space corridor – as a mixed-use residential development with 24 hour occupancy.

8.3.11 Environmental sustainability

The proposal adopts a comprehensive ESD approach to the planning, siting, design and management of the facilities to include the principles of the *Green Globe Precinct Planning Design Standard* (PPDS) that are underpinned by the following environmental indicators of:

- Sustainable master planning approach
- Site planning and building location
- Social commitment
- Energy efficiency and conservation, with solar collection via photovoltaic cells
- Water conservation and management
- Solid and other waste management
- Resource conservation (materials)
- Waste water management
- Stormwater management

8.4 Residential Amenity Assessment

8.4.1 Solar access to residential apartments

All apartments receive the minimum 2 hours of sun between 9am and 3pm, and more than 4 hours of sun between 7am and 5pm in mid-winter.

The western facades of adjacent residences and properties to the east, located close to their western boundary, are impacted by the proposed development and receive approx. 1.5 hours of solar access in mid-winter.

Residences and properties to the west are not overshadowed by the proposed development.

8.4.2 Overshadowing impacts on surrounding areas and communal areas within the site

Mid-winter (21 June)

From 9am-3pm in mid-winter (21 June), the impacts of overshadowing by the proposed development of, and the solar access to, surrounding areas are as follows:

- Residential properties in Haberfield (to the west and south-west) receive sun and are not overshadowed by the proposed development.
- Majority of Lambert Park football field receives 6 hours of sun with only a small northern portion of the Lambert Park football field overshadowed – from 3pm.
- The Marion's linear courtyard located along its western setback area receives over 4 hours of sun with overshadowing from 1.15pm onwards.
- The western façade of The Marion receives approx. 1.5 hours of sun with overshadowing from 1.30pm onwards.
- The central courtyard of The Marion is not overshadowed by the proposed development until approx. 2.30pm onwards.
- Lambert Park Day Care Centre, located to the south-east of Lambert Park, is not overshadowed by the proposed development.
- Marion light rail station is overshadowed from 8-10.30pm and receives sun for 6 hours until 4.30pm.

Detailed analysis of the overshadowing by the proposed development is as follows:

| Surrounding areas | Communal areas within the site |
|--|--|
| 9am (Figure 8.19a) | |
| Overshadowing impacts on: | |
| <ul style="list-style-type: none"> Light rail station, Hawthorne Canal and The Greenway – to the west and south-west. Portion of Marion Street – to the south-west. | <ul style="list-style-type: none"> 1/3 of the communal area between the 2 buildings. |
| No overshadowing impacts on: | |
| <ul style="list-style-type: none"> Haberfield residential properties – to the west and south-west. The Marion Age Care Facility – to the east. Lambert Park – to the south. | <ul style="list-style-type: none"> Northern setback area to Walter Street. Roof gardens to Northern and Southern Buildings. Internal laneway/ street within the site. |

| Surrounding areas | Communal areas within the site |
|--|--|
| 12pm (Figure 8.19b) | |
| Overshadowing impacts on: | |
| <ul style="list-style-type: none"> Portion of Marion Street – to the south. Small western portion of Lambert Park's grandstand – to the south. | <ul style="list-style-type: none"> 3/4 of the communal area between Northern and Southern Buildings. |
| No overshadowing impacts on: | |
| <ul style="list-style-type: none"> Haberfield residential properties – to the south-west. The Marion Age Care Facility – to the east. Lambert Park football field – to the south. | <ul style="list-style-type: none"> Northern setback area to Walter Street. Roof gardens to Northern and Southern Buildings. Internal laneway/ street within the site. |



Figure 8.19a: Sun Angles – 9am Mid-Winter (source: FJT)



Figure 8.19b Sun Angles – 12pm Mid-Winter (source: FJT)

| Surrounding areas | Communal areas within the site |
|--|--|
| 1pm (Figure 8.19c) | |
| Overshadowing impacts on: | |
| <ul style="list-style-type: none"> Portion of Marion Street – to the south. Western portion (up to ¼) of the length of Lambert Park’s grandstand – to the south. | <ul style="list-style-type: none"> ¾ of the communal area between Northern and Southern Buildings. ½ of the internal street within the site. |
| No overshadowing impacts on: | |
| <ul style="list-style-type: none"> The Marion Age Care Facility – to the east. Lambert Park football field – to the south. | <ul style="list-style-type: none"> Northern setback area to Walter Street. Roof gardens to Northern and Southern Buildings. |

| Surrounding areas | Communal areas within the site |
|--|--|
| 1.30pm (Figure 8.19d) | |
| Overshadowing impacts on: | |
| <ul style="list-style-type: none"> Portion of Marion Street – to the south. Western portion (up to 1/3) of the length of Lambert Park’s grandstand – to the south. Western façade of The Marion adjacent to its western boundary – to the east. | <ul style="list-style-type: none"> 2/3 of the communal area between Northern and Southern Buildings. Major portion of the internal street within the site. |
| No overshadowing impacts on: | |
| <ul style="list-style-type: none"> Central courtyard of The Marion – to the east. Lambert Park football field – to the south. | <ul style="list-style-type: none"> Northern setback area to Walter Street. Roof gardens to Northern and Southern Buildings. |



Figure 8.19c: Sun Angles – 1pm Mid-Winter (source: FJT)



Figure 8.19d: Sun Angles – 1.30pm Mid-Winter (source: FJT)

| Surrounding areas | Communal areas within the site |
|--|---|
| 2pm (Figure 8.19e) | |
| Overshadowing impacts on: | |
| <ul style="list-style-type: none"> Portion of Marion Street – to the south and south-east. Western portion (nearly ½) of the length of Lambert Park’s grandstand – to the south. Western façade of The Marion adjacent to its western boundary – to the east. | <ul style="list-style-type: none"> 2/3 of the communal area between Northern and Southern Buildings. Majority of the internal street within the site. |
| No overshadowing impacts on: | |
| <ul style="list-style-type: none"> Central courtyard of The Marion – to the east. Major portion of Lambert Park football field – to the south. | <ul style="list-style-type: none"> Northern setback area to Walter Street. Roof gardens to Northern and Southern Buildings. |

| Surrounding areas | Communal areas within the site |
|--|---|
| 3pm (Figure 8.19f) | |
| Overshadowing impacts on: | |
| <ul style="list-style-type: none"> Portion of Marion Street – to the south-east. Over 50% of The Marion and ¾ of its central courtyard – to the east. 75% of Lambert Park’s grandstand – to the south and south-east. Small portion of Lambert Park football field – to the south. | <ul style="list-style-type: none"> ½ of the communal area between Northern and Southern Buildings. Majority of the internal street within the site. |
| No overshadowing impacts on: | |
| <ul style="list-style-type: none"> Most of Lambert Park football field – to the south. | <ul style="list-style-type: none"> Northern setback area to Walter Street. Roof gardens to Northern and Southern Buildings. |



Figure 8.19e: Sun Angles – 2pm Mid-Winter (source: FJT)



Figure 8.19f: Sun Angles – 3pm Mid-Winter (source: FJT)

Solstice (21 March/ 21 September)

From 9am-3pm at the spring and autumn solstices (21 March and 21 September), the impacts of overshadowing by the proposed development of, and the solar access to, surrounding areas are as follows:

- Residential properties at Haberfield (to the west and south-west) receives sun and are not impacted by overshadowing.
- Lambert Park football field is not impacted by overshadowing.
- The Marion's linear courtyard located along its western setback area receives over 5 hours of sun with overshadowing from 2pm onwards.

- The western façade of The Marion receives approx. 2 hours of sun with overshadowing from 2.30pm onwards.
- The central courtyard of The Marion is not overshadowed by the proposed development until approx. 4pm onwards.
- Lambert Park Day Care Centre, located to the south-east of Lambert Park, is not overshadowed by the proposed development.

Detailed analysis of the overshadowing and solar access is as follows:

| Surrounding areas | Communal areas within the site |
|---|--|
| 9am (Figure 8.20a) | |
| Overshadowing impacts on: | |
| <ul style="list-style-type: none"> ▪ The light rail station, Hawthorne Canal and The Greenway – to the west and south-west. ▪ Portion of Marion Street northern footpath – to the south-west. | <ul style="list-style-type: none"> ▪ 1/4 of the communal area between the 2 buildings. |
| No overshadowing impacts on: | |
| <ul style="list-style-type: none"> ▪ Haberfield residential properties – to the west and south-west. ▪ The Marion Age Care Facility – to the east. ▪ Lambert Park – to the south. | <ul style="list-style-type: none"> ▪ Northern setback area to Walter Street. ▪ Roof gardens to Northern and Southern Buildings. ▪ Internal laneway/ street within the site. |

| Surrounding areas | Communal areas within the site |
|---|--|
| 12pm (Figure 8.20b) | |
| Overshadowing impacts on: | |
| <ul style="list-style-type: none"> ▪ Portion of Marion Street northern footpath – to the south. | <ul style="list-style-type: none"> ▪ 1/3 of the communal area between Northern and Southern Buildings. |
| No overshadowing impacts on: | |
| <ul style="list-style-type: none"> ▪ Haberfield residential properties – to the south-west. ▪ The Marion Age Care Facility – to the east. ▪ Lambert Park – to the south. | <ul style="list-style-type: none"> ▪ Northern setback area to Walter Street. ▪ Roof gardens to Northern and Southern Buildings. ▪ Internal laneway/ street within the site. |



Figure 8.20a: Sun Angles – 9am Solstice (source: FJT)



Figure 8.20b: Sun Angles – 12pm Solstice (source: FJT)

| Surrounding areas | Communal areas within the site |
|---|--|
| 2pm (Figure 8.20c) | |
| Overshadowing impacts on: | |
| <ul style="list-style-type: none"> Portion of Marion Street northern footpath– to the south-east. Portion of the western façade of The Marion adjacent to its western boundary – to the east. | <ul style="list-style-type: none"> 1/3 of the communal area between Northern and Southern Buildings. 1/2 of the internal street within the site. |
| No overshadowing impacts on: | |
| <ul style="list-style-type: none"> Central courtyard of The Marion – to the east. Lambert Park – to the south. | <ul style="list-style-type: none"> Northern setback area to Walter Street. Roof gardens to Northern and Southern Buildings. |

| Surrounding areas | Communal areas within the site |
|---|---|
| 3pm (Figure 8.20d) | |
| Overshadowing impacts on: | |
| <ul style="list-style-type: none"> Portion of Marion Street northern footpath – to the south-east. 2/3 of the western façade of The Marion – to the east. | <ul style="list-style-type: none"> 1/4 of the communal area between Northern and Southern Buildings. Majority of the internal street within the site. |
| No overshadowing impacts on: | |
| <ul style="list-style-type: none"> Lambert Park – to the south. Central courtyard of The Marion – to the east. | <ul style="list-style-type: none"> Northern setback area to Walter Street. Roof gardens to Northern and Southern Buildings. |



Figure 8.20c: Sun Angles – 2pm Solstice (source: FJT)



Figure 8.20d: Sun Angles – 3pm Solstice (source: FJT)

8.4.3 Natural ventilation

The Concept Design ensures that all habitable rooms can be naturally ventilated, with the design providing cross ventilation to over 70% of apartments.

8.4.4 Visual privacy

Visual privacy between the development and adjacent properties:

- To the East – lower level apartments can be ameliorated with the row of canopied trees planted along the eastern boundary to the Age Care Centre. Balconies will be screened as required.
- To the West – lower level apartments can be ameliorated by hedge planting along the western boundary to the light rail corridor. Apartments are located at least 3.5m from the western boundary. Dense tree planting will be encouraged along the rail corridor.
- To the North – lower level terraces can be ameliorated by canopied trees along the northern boundary. Upper levels are setback over 15m from the northern boundary.
- To the South – apartments at upper levels are setback 10m from the southern boundary.

8.4.5 Acoustic privacy

Acoustic privacy within the development can be ameliorated by acoustic attenuation between these uses in accordance with National Construction Code requirements.

8.4.6 Residential amenity outcomes

The built form of the Concept Design results in acceptable residential amenity of views, solar access, visual and acoustic privacy on surrounding residential properties and open space areas. The separation distances between the proposed development and the adjacent development to the east (the aged care facility) comply with the *Apartment Design Guide* to deliver good solar access and visual and acoustic privacy outcomes.

The Concept Design illustrates the ability of a development of the proposed density and heights to generally maintain good solar amenity in providing more than 4 hours of sunlight in mid-winter to surrounding residences and public open spaces.

8.5 Visual Assessment of the Concept Design

8.5.1 View 1

View of the site and the proposed Concept Design from Marion Street west, just beyond the intersection with Hawthorne Parade

The urban form of the proposed 8 storey development comprises a 3 storey podium and two 5 storey buildings above.

The podium is sited close to Marion Street with a setback of approximately 1.5-1.6m to match the setback of the adjacent Age Care Facility to its east.

The 5 storey residential buildings/ towers above the podium have a separation distance from each other of 25m. The southern tower is setback 10m from Marion Street.

The overall height and built form of the proposed development is not incongruous in this setting, seen behind the light rail overpass and the lift structure of the light rail station. These elements, as well as the dense canopy of mature trees located along the Hawthorne Canal, partially screen the development from view.

The podium is largely concealed from view behind the rail overpass at Marion Street. The separation distance between the two residential towers enable views of the sky beyond, reducing the visual impact of the development. The proposed height of the development is aligned with the height of the tree canopies along the canal corridor and at Lambert Park.

Figure 8.21a: Existing view of the site from Marion Street west

Figure 8.21b: View of the site from Marion Street west with Concept Design



Figure 8.21a: Existing view of the site from Marion Street west (source: FJT)



Figure 8.21b: View of the site from Marion Street west with Concept Design (source: FJT)

8.5.2 View 2

View of the site and the proposed Concept Design from Marion Street east

The proposed development is seen against the adjacent 2 and 3 storey Age Care Facility to its east.

The visual curtilage of the proposed development is viewed against the urban forms of the Age Care Facility, railway overpass across Marion Street and the 4.5m (approx.) screen wall to Lambert Park. The 3 storey podium is consistent with the built form of the Age Care Facility. There are no smaller scale residential forms within the vicinity of the site. The streetscape of low density dwellings is located to the east of the Age Care Facility.

The proposed height of the development is consistent with the height of mature trees located along the northern boundary of Lambert Park (at the southern side of Marion Street) and along the northern footpath of Marion Street. The development is congruous with the urban setting of its immediate context.

Figure 8.22a: Existing view of the site from Marion Street east

Figure 8.22b: View of the site from Marion Street east with Concept Design



Figure 8.22a: Existing view of the site from Marion Street east (source: FJT)



Figure 8.22b: View of the site from Marion Street east with Concept Design (source: FJT)

8.5.3 View 3

View of the site and the proposed Concept Design from Walter Street

The 3 storey podium is congruous with the height of surrounding single and 2 storey developments to the east of the site.

The podium is setback 5m from the northern boundary of the site, behind a landscaped setback frontage to Walter Street, planted with deciduous trees with height at maturity of at least 6m. These trees will provide partial visual screening of the development from Walter Street.

Evergreen trees planted along the eastern boundary of the site, with height at maturity of at least 6m, will provide a vegetated screen to the Aged Care Facility.

The podium roofs and roofs of the two residential “towers” will be landscaped.

The backdrop of the development to the west is the densely vegetated light rail corridor.

Figure 8.23a: Existing view of the site from Walter Street

Figure 8.23b: View of the site from Walter Street with Concept Design



Figure 23a: Existing view of the site from Walter Street (source: FJT)



Figure 8.23b: View of the site from Walter Street with Concept Design (source: FJT)

8.6 Views of the Concept Design

8.6.1 Neighbouring views



Figure 8.24: Aerial view north-west from Marion Street of the proposed development (source: FJT)



Figure 8.25: Aerial view east of the proposed development (source: FJT)



Figure 8.26.: Aerial view north-east of the proposed development from railway bridge over Marion Street (source: FJT)



Figure 8.27: View south-east of the proposed development from light rail corridor (source: FJT)

8.6.2 Views from surrounding streets



Figure 8.28: View of proposed development and light rail overpass from Marion Street (source: FJT)



Figure 8.29: View of proposed development from Walter Street (source: FJT)



Figure 8.30: View south-west of Southern Building from Internal Laneway (source: FJT)



Figure 8.31: View north-west of proposed development from Internal Laneway (source: FJT)

8.6.3 Aerial views



Figure 8.32: Aerial view south-east of proposed development (source: FJT)



Figure 8.33: Aerial view north-east of proposed development (source: FJT)

9.0 URBAN DESIGN EVALUATION

9.1 Urban Design Principles, Guidelines and Concept Design Intent

To achieve a quality urban design outcome for the site, with consideration of the context of the site and its surrounding characteristics, site conditions, its constraints and opportunities, development on the site must be guided by sound urban design principles. These principles inform the urban design guidelines for the site. Development shall be planned and designed in accordance with these urban design principles and urban design guidelines.

The Concept Design to support the Planning Proposal for rezoning of the site for higher density land uses provides a design that complies with sound urban design principles in the siting and design of the development.

Evaluation of the Concept Design against robust urban design principles and guidelines is as follows:

| Urban Design Principles | Urban Design Guidelines | Concept Design Intent |
|--|--|--|
| A. Design for Variety/ Mixed Uses and Forms | | |
| <ul style="list-style-type: none"> Provide a variety of compatible uses to create a sustainable and desirable development. Facilitate uses that encourage active streetscapes and passive surveillance of the public domain. | <ul style="list-style-type: none"> Facilitate land uses that complement the public transport node. Add to the mix of housing types and choices in the locality. Provide for land uses that meet the changing needs of the neighbourhood. | <p>The Concept Design provides:</p> <ul style="list-style-type: none"> Variety of land uses is proposed within the development – of urban services, retail, commercial and residential. Active uses at ground level (L1) to activate the public street and laneway within the site and contribute to passive surveillance of the public domain. A mix of multi-unit housing typologies, as well as dwelling sizes (studio, 1-3 bedrooms) – to enable people to relocate within their local area and stay connected to services and social networks. Housing supply, choice and affordability, with access to jobs, services and public transport in line with: <ul style="list-style-type: none"> Objective 10 and 11 – <i>Greater Sydney Region Plan</i>. Planning Priority E5 – <i>Eastern City District Plan</i>. Height and bulk of the proposed development responding to, and is consistent with, the urban form of the historical industrial landscape adjacent to the rail corridor. |
| B. Create Places for People | | |
| <ul style="list-style-type: none"> Create quality of public realm in terms of pedestrian amenity, safety, and attractiveness. Ensure buildings surrounding the public realm engage with these spaces by opening up and connecting to them. Create an environment where everyone can access and benefit from the full range of opportunities that the site has to offer. | <ul style="list-style-type: none"> Provide urban design measures that respect and contribute to the existing streetscape, future neighbourhood character and local heritage, and addresses the site's environmental constraints. Provide public domain benefits and improvements to the precinct, particularly around the Marion Street light rail station. Provide an attractive and engaging public domain with high pedestrian amenity of quality spaces, landscape features, universal access and sheltered pathways, and safety in design. | <p>The Concept Design provides:</p> <ul style="list-style-type: none"> Amenity at Ground and Basement Levels of employment uses. A quality landscaped internal laneway and public domain with high pedestrian amenity at street (ground) level), with: <ul style="list-style-type: none"> Deep soil planting for canopied evergreen trees along the eastern site boundary and canopied deciduous trees along the northern site boundary, which adjoins residential properties and street. A new active streetscape to reinforce local linkages. Sheltered pedestrian walkway to improve connectivity through the site, between Walter Street and Marion Street. Landscaped terrace for the residences on the roof of podium between the two buildings (sited to the north and south): <ul style="list-style-type: none"> Safe from vehicular traffic, as it is elevated above internal laneway, and With passive surveillance as the area is overlooked by the residential towers. Separate entrances for residential and business tenancies, with: <ul style="list-style-type: none"> Business uses fronting and accessed from Marion Street, Walter Street and the internal laneway. Residential uses accessed from the internal laneway. Increase urban tree canopy with planting of trees along the eastern and northern boundaries to replace a site with little tree cover as the existing building covers the majority of the site, in line with: <ul style="list-style-type: none"> Objective 30 – <i>Greater Sydney Region Plan</i>. Planning Priority E17 – <i>Eastern City District Plan</i>. |

| Urban Design Principles | Urban Design Guidelines | Concept Design Intent |
|--|--|--|
| <p>C. Enrich the Existing</p> <ul style="list-style-type: none"> ▪ Encourage active engagement from neighbourhood areas into the site. ▪ Design the development to respect and integrate with the surrounding urban forms. ▪ Design to respect the residential amenity of surrounding properties. ▪ Provide legible connections through the development to create an active public domain. ▪ Contribute to existing residential neighbourhood with complementing housing typologies. | <ul style="list-style-type: none"> ▪ Create a landmark/ gateway development, architecturally attractive to highlight this transport node. ▪ Design a development that sensitively integrates with its contextual environment and minimise residential impacts on surrounding developments and neighbourhood. ▪ Encourage active engagement from neighbourhood areas into the site through the provision of convenient retail, business and urban service facilities to complement its location next to a light rail stop. ▪ Provide a high quality sustainable building. | <p>The Concept Design provides:</p> <ul style="list-style-type: none"> ▪ Built forms with setbacks from boundaries to residential areas to provide optimum amenity to residences. ▪ Buildings with a 3 storey podium that relates to, and integrates with, the fine-grain residential built forms in surrounding streets and the 2-3 storey aged care facility to its east. The 5 storey residential towers sited above the podium, with deep setbacks from the street, to reduce their impact, of: <ul style="list-style-type: none"> – 10m from Marion Street. – Over 15m from Walter Street. ▪ Setting back of the uppermost storey of the towers by approx. 2m from the tower footprint, with the creation of a landscaped terrace bordering these residences. ▪ Landscaping tower setback areas/ podium roofs and apartment terraces to provide residential amenity and to “soften” the building forms, as seen from the street and public domain. ▪ Legible connections between Marion and Walter Streets through the site to the light rail station. ▪ A mix of residential typologies for all age groups of various sizes for family, seniors and affordable market. ▪ Siting and design of buildings that respects and maintains the residential amenity (visual, privacy, acoustic and solar access) of surrounding properties. ▪ Row of canopied trees along the eastern boundary to improve local landscape and microclimate control benefits. ▪ Convenient retail and community facilities at the development’s ground/ street level. ▪ Retention of existing urban services (vehicle servicing facility) as well as introduce additional retail and employment uses in line with: <ul style="list-style-type: none"> – Objective 23 – <i>Greater Sydney Region Plan</i>. – Planning Priority E12 – <i>Eastern City District Plan</i>. ▪ High quality sustainable development in line with: <ul style="list-style-type: none"> – Objectives 34 and 35 – <i>Greater Sydney Region Plan</i>. – Planning Priority E19 – <i>Eastern City District Plan</i>. |
| <p>D. Encourage Permeability</p> <ul style="list-style-type: none"> ▪ Improve and reinforce connections to the site, both physically and visually, with surrounding neighbourhood areas. ▪ Provide greater legibility of the site through design to provide visual connections into and from the site. ▪ Reinforce and improve pedestrian connections through the site from neighbouring areas. ▪ Provide universal access within the public domain. ▪ Create safe connections through the site with Crime Prevention through Environmental Design Measures. | <ul style="list-style-type: none"> ▪ Improve connections between the light rail station, surrounding residential neighbourhoods and public recreational open spaces. ▪ Create a legible, permeable and universally accessible public domain at street level that connects to the surrounding neighbourhood and the light rail station. | <p>The Concept Design provides:</p> <ul style="list-style-type: none"> ▪ Legible, direct, sheltered and visible connections between Marion Street and Walter Street from neighbouring streets to the light rail station, through the site. ▪ Universally accessible public domain and pedestrian pathways to provide an inclusive environment. ▪ Pedestrian paths sited adjacent to active frontages to ensure passive surveillance. |

| Urban Design Principles | Urban Design Guidelines | Concept Design Intent |
|---|---|--|
| E. Create Legibility | | |
| <ul style="list-style-type: none"> ▪ Incorporate the legibility and identity of the focal light rail station with a development that complements its location. ▪ Connect the development to the surrounding public domain. | <ul style="list-style-type: none"> ▪ Create a legible, permeable and universally accessible public domain at street level that connects to the surrounding neighbourhood and the light rail station. | <p>The Concept Design provides:</p> <ul style="list-style-type: none"> ▪ A design form that expresses the dual character of the development (of employment and residential uses) that is compatible with historical industrial forms sited along the railway corridor. ▪ The north-south alignment of buildings (between Marion Street and Walter Street) – of an internal laneway bordered by a row of trees along its boundary, and sheltered footpath along active shopfronts provide legibility to the public domain at street level. ▪ An architectural building expression that will create an identity to the light rail station as well as a “gateway” entry to Leichhardt, but sensitive to the context of the site. |
| F. Design for Robustness | | |
| <ul style="list-style-type: none"> ▪ Ensure new building layouts, design and forms have robustness of use, with: <ul style="list-style-type: none"> – Quality and energy efficient design. – Design that complies with <i>SEPP 65 Design Quality of Residential Apartment Development</i>; – High building standards. – Contribution to and improvement of the streetscape quality with setbacks that provide for landscape, street trees and pedestrian amenity. – Design for optimum residential amenity. – Design for residential liveability and affordability. | <ul style="list-style-type: none"> ▪ Provide a high quality, sustainable and liveable development with: <ul style="list-style-type: none"> – Quality and energy efficient design; – High building standards; – Attention to noise attenuation; – Minimise visual and residential amenity impacts. | <p>The Concept Design provides:</p> <ul style="list-style-type: none"> ▪ Flexibility in layout of employment uses and in residential typologies to suit the needs of present and future users. ▪ A design that will deliver: <ul style="list-style-type: none"> – Design that is compliant with SEPP 65: <i>Design quality for Residential Apartment Development</i>. – Quality and energy efficient design. – Optimum residential amenity. – Residential liveability and affordability. – Acoustic/ noise attenuation measures to provide optimum residential amenity. – Quality residential open space and public domain areas. – Diverse housing typologies and sizes. – Flexible use of employment spaces to cater for evolving business practices and changes in needs for these services. |
| G. Design for Economic Feasibility | | |
| <ul style="list-style-type: none"> ▪ Ensure that the development is economically viable by establishing uses for the site that have economic demands. ▪ Provide for economically viable development density appropriate to site location and land values. | <ul style="list-style-type: none"> ▪ Create a responsive, affordable design that is economically feasible and viable. | <p>The Concept Design:</p> <ul style="list-style-type: none"> ▪ Retains an urban service amenity as well as deliver ancillary employment uses for the local community. ▪ Responds to housing market demands that optimises its location adjacent to a public transport network, and the demand for housing and employment uses within 30 minutes from the Sydney CBD. ▪ Eases the demand for traditional housing stock and to provide opportunities to downsize from the traditional dwelling typology to alternative housing typologies. ▪ Delivers opportunities for smaller dwellings (studio and 1 bedroom apartments) to contribute to housing affordability. |
| H. Design for Environmental Sustainability | | |
| <ul style="list-style-type: none"> ▪ Ensure that the development is environmentally sustainable with: <ul style="list-style-type: none"> – Land use and density that is appropriate to its transit-oriented location; – Creation of an improved quality of life or its occupants and users; – An ESD approach to the planning, siting, design and management of the site and development. | <ul style="list-style-type: none"> ▪ Provide an environmentally responsible design in the siting, design, construction and management of the development. | <p>The Concept Design:</p> <ul style="list-style-type: none"> ▪ Provides the opportunity to optimise the existing modes of transport, with its location: <ul style="list-style-type: none"> – Adjacent to public transport of light rail and bus. – Within walking distance to heavy rail. – Adjacent to a cycleway that connects to the Sydney CBD. ▪ Provides the opportunity to deliver a mixed-use building. ▪ Utilises passive design principles of siting, orientation, optimising solar access and natural ventilation. ▪ Provides the opportunity to deliver an environmentally responsible/ sustainable building in passive design measures and active design strategies. ▪ Incorporates ecologically sustainable development principles into all facets of the development, where possible. |

9.2 Urban Design Commitments

The Concept Design prepared to support the Planning Proposal illustrates a design that meets the key design criteria for quality design to achieve:

- A landmark/ gateway development, architecturally attractive to highlight this transport mode.
- Quality and energy efficient design.
- High building standards.
- Attention to noise attenuation.
- Minimise visual impacts.
- Access to open space.
- Connectivity to its surrounding neighbourhood.
- Urban design measures that respect and contribute to its existing streetscape future neighbourhood character, local heritage and environmental constraints.
- Public domain benefits and improvements to the precinct around the future Marion light rail station.
- A legible and permeable public domain at street level that connects to the surrounding neighbourhood and the light rail transport node.
- An attractive and engaging public domain with high pedestrian amenity of quality spaces, landscape features, universal accessible and sheltered pathways and safety in design.
- Landscaped communal open spaces at upper levels (podium and tower roofs) to deliver quality public amenity to its residents.

Development on the site will be designed in accordance with sound urban design principles and to meet the key urban design criteria for the urban renewal and regeneration of the site, outlined in this report.

10.0 SEPP 65 & “APARTMENT DESIGN GUIDE” EVALUATION

10.1 SEPP 65 Evaluation

State Environmental Planning Policy No. 65 – *Design Quality of Residential Apartment Development* (SEPP 65) and the *Apartment Design Guide* apply to new, redeveloped and refurbished residential flat buildings, shop top housing and the residential component of mix use developments that are:

- More than 3 storeys in height; and
- Have 4 or more dwellings.

Design Quality Principles

SEPP 65 establishes 9 Design Quality Principles to be applied in the design and assessment of residential apartment developments of:

- Context and neighbourhood character
- Built form and scale
- Density
- Sustainability
- Landscape
- Amenity
- Safety
- Housing diversity and social interaction
- Aesthetics

Assessment of compliance of the Concept Design with the Design Quality Principles is as follows:

| Design Quality Principle | Design Response |
|--|---|
| Principle 1: Context and neighbourhood character | |
| <p>Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions.</p> <p>Responding to context involves identifying the desirable elements of an area’s existing or future character. Well-designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood.</p> <p>Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change.</p> | <p>The site is an existing industrial site located adjacent to Marion Light Rail Station.</p> <p>The existing building is single storey with a saw-toothed roof with site coverage over a majority of the site.</p> <p>Context The site is bordered by:</p> <ul style="list-style-type: none"> ▪ 2 and 3 storey developments to the east (age care facility) and west (the railway bridge over Marion Street and the light rail station). ▪ Vegetated open space corridor of the “Greenway” east of the railway line, with high canopied trees. ▪ Lambert Park – to the south. ▪ Leichhardt Market <p>Neighbourhood character To the:</p> <ul style="list-style-type: none"> ▪ North, north-east and east of the site is a low-density neighbourhood with single and 2 storey dwellings on small allotments. |

| Design Quality Principle | Design Response |
|--------------------------|---|
| | <ul style="list-style-type: none"> ▪ South of the Park is the large industrial landholding at Lords Road, which is subject to redevelopment to higher order uses. <p>The adjacent site to the east was redeveloped in the mid-1980s as a residential age care facility.</p> <p>The site, and the adjacent site to the east, are characteristic of the many historically large landholdings along the light rail line (formerly the goods rail line) for industrial purposes. The historical industrial typologies on these sites have been large and high building forms, higher than their surrounding fine-grain, low density residential precincts.</p> <p>Many of these sites have been redeveloped in recent years for mixed-use and residential developments of up to 13 storeys in height.</p> <p>The Concept Design provides less site coverage on the site than the existing building, which results in quality landscaped public domain with a public pedestrian accessway through the site and urban tree canopy.</p> |

| Design Quality Principle | Design Response |
|---|--|
| Principle 2: Built form and scale | |
| <p>Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings.</p> <p>Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements.</p> <p>Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.</p> | <p>The Concept Design proposes a built form, 8 storeys in height, comprising a:</p> <ul style="list-style-type: none"> ▪ 3 storey podium which extends the length of the site, with setbacks at: <ul style="list-style-type: none"> – Marion Street – to match the setback of the adjacent development to the east (1.6m). – Walter Street – exceeding the setback of adjacent properties and to allow for deep soil planting (6m). ▪ 2 residential “towers” (5 storeys in height) is sited above the podium, and is stepped back from the street, with setbacks at: <ul style="list-style-type: none"> – Marion Street – of 10m. – Walter Street – 15.6m approx. ▪ The uppermost storey of the “towers” is setback by a further 2m – to reduce the scale of the buildings as seen from the street, and to provide a continuous landscaped terrace to the uppermost residences. <p>There are no height controls within this precinct under Leichhardt LEP 2013.</p> <p>The 3 storey podium reinforces the street edge and is of an appropriate height and scale to the existing streetscape of the rail bridge, embankment and rail line to the west, and the 2 and 3 storey age care facility to the east.</p> <p>The height and bulk of the development proposed are consistent with mass and scale of historic industrial buildings sited along the rail line.</p> |
| Principle 3: Density | |
| <p>Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context.</p> <p>Appropriate densities are consistent with the area's existing or projected population.</p> <p>Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.</p> | <p>The site is located adjacent to quality public transport of light rail and bus, which justifies a transit-oriented development in this location, and within 400m of a retail-commercial centre (Leichhardt Market Place).</p> <p>The density sought is commensurate with developments adjacent to rail and light rail corridors.</p> <p>The Concept Design achieves a high level of amenity in residential component of the proposed development.</p> |

| Design Quality Principle | Design Response |
|--|---|
| Principle 4: Sustainability | |
| <p>Good design combines positive environmental, social and economic outcomes.</p> <p>Good sustainable design includes use of natural cross ventilation and sunlight for the amenity and liveability of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and operation costs. Other elements include recycling and reuse of materials and waste, use of sustainable materials and deep soil zones for groundwater recharge and vegetation.</p> | <p>The Concept Design incorporates passive and active ecologically sustainable development (ESD) strategies in the siting, orientation and layout of the buildings to achieve:</p> <ul style="list-style-type: none"> ▪ Minimum of 2 hours solar access in mid-winter to all apartments. ▪ Natural ventilation to all apartments. ▪ Over 70% of apartments are cross-ventilated. <p>ESD measures will be implemented in the detailed design of the development.</p> <p>Deep soil zones are provided along the northern and eastern boundaries of the site – to enable the planting of medium-sized canopied trees.</p> |
| Principle 5: Landscape | |
| <p>Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well-designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood.</p> <p>Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, micro-climate, tree canopy, habitat values and preserving green networks.</p> <p>Good landscape design optimises useability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity and provides for practical establishment and long-term management.</p> | <p>The public domain and open space areas at ground level will be landscaped with canopied trees along the eastern and northern boundaries:</p> <ul style="list-style-type: none"> ▪ For microclimate control. ▪ For visual privacy to and from adjacent residences and rail line. ▪ To increase urban tree canopy cover within the site. <p>Additionally, podium and “tower” building roofs, residential terraces and balconies are landscaped for use as communal or private open space.</p> <p>Water sensitive urban design measures will be implemented within the public domain for water capture, use of bioretention measures and in the irrigation of vegetation within the development.</p> <p>Landscaping of podiums, roofs and terraces is integrated with the design of the built forms, and integral to the aesthetic treatment of the development.</p> |

| Design Quality Principle | Design Response |
|--|---|
| Principle 6: Amenity | |
| <p>Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well-being.</p> <p>Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas and ease of access for all age groups and degrees of mobility.</p> | <p>The Concept Design provides high residential amenity to all residences with:</p> <ul style="list-style-type: none"> Minimum of 2 hours solar access in mid-winter to all apartments. Natural ventilation to all apartments. Over 70% of apartments are cross-ventilated. Lower level residential balconies and terraces to be provided with landscaping or privacy screens. <p>Amenity to adjacent residences and residential properties to the east and west, particularly in mid-winter (21 June), with:</p> <ul style="list-style-type: none"> Residential properties in Haberfield (to the west and south-west) receiving sun. Western setback area, western façade and central courtyard of Age Care facility receiving over 4 to 5.5 hours of sun. Majority of Lambert Park (to the south) receiving up to 6 hours of sun. Marion light rail station receiving up to 6 hours of sun. <p>Each apartment is provided with open space areas compliant with the requirements of the <i>Apartment Design Guide</i>.</p> |
| Principle 7: Safety | |
| <p>Good design optimises safety and security within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety.</p> <p>A positive relationship between public and private spaces is achieved through clearly defined secure access points and well-lit and visible areas that are easily maintained and appropriate to the location and purpose.</p> | <p>The public domain of the north-south laneway at ground level and the communal open space located centrally above the driveway into the development are overlooked by residences.</p> <p>The laneway is additionally bordered to the west by business tenancies.</p> <p>Residential and business tenancy entries are:</p> <ul style="list-style-type: none"> Clearly defined and separated. Accessed from external roads or the internal laneway. |

The built form of the Concept Design does not have undue impacts of views, solar access, visual and acoustic privacy on surrounding residential properties and open space areas.

The Concept Design illustrates the ability of a development of the proposed density and heights to maintain good solar amenity in providing more than 4 hours of sunlight in mid-winter to surrounding residences and public open spaces, except for the western side of the age care facility which will receive only 1.5 hours of solar access.

| Design Quality Principle | Design Response |
|--|---|
| Principle 8: Housing diversity and social interaction | |
| <p>Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.</p> <p>Well-designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix.</p> <p>Good design involves practical and flexible features, including different types of communal spaces for a broad range of people and providing opportunities for social interaction among residents.</p> | <p>A mix of studio, 1, 2 and 3 bedroom apartments are proposed within the development, with a variety of design layouts. Apartments are designed:</p> <ul style="list-style-type: none"> To suit all age groups, from singles, families to seniors. With a choice of larger private open space for a number of 2 and 3+ bedroom apartments. <p>Residents have access to communal open space at:</p> <ul style="list-style-type: none"> First Floor level – above the central driveway into the development. Roof top gardens above the “tower” buildings. |
| Principle 9: Aesthetics | |
| <p>Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures.</p> <p>The visual appearance of a well-designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.</p> | <p>The Concept Design provides a design that complies with the Apartment Design Guide. The 3 storey podium is designed to be of a height that is compatible with the surrounding streetscape, with higher built forms setback from surrounding streets.</p> <p>The more slender forms at upper levels minimises overshadowing of surrounding properties and public recreational space of Lambert Park.</p> <p>The juxtaposition of solids and voids provide articulation of the building facades.</p> <p>To add greenery to the building and to “soften” the building facades, landscaping is provided:</p> <ul style="list-style-type: none"> On communal roof garden located between buildings – at Level 1. Along deep terraces and balconies – at Level 1. On roofs of podium – at Level 3. Along the terraces – at Level 8. On communal roof gardens – above the two “tower” buildings. |

A future development on the site will be designed, within the urban design guidelines of this Urban Design Study – to respect and integrate with the existing neighbourhood through setbacks, stepped forms and articulation of building forms. Residential amenity will be achieved within the proposed building’s siting, massing, forms and heights. Quality architectural design and amenity will be implemented in accordance with SEPP 65: *Design Quality of Residential Flat Development*.

10.2 Apartment Design Guide Evaluation

Assessment of the proposed Concept Design against the *Apartment Design Guide* – Design Criteria and Design Guidance is as follows:

| Development controls | Proposed development | Compliance |
|---|---|----------------------------|
| PART 2: DEVELOPING THE CONTROLS | | |
| 2C Building height Aims: <ul style="list-style-type: none"> Building height controls ensure development responds to the desired future scale and character of the street and local area. Adequate daylight and solar access is facilitated to apartments, common open space, adjoining properties and the public domain. | <p>There is no building height control on the site and its precinct required under <i>Leichhardt LEP 2013</i>.</p> <p>Apartments and external communal open spaces within the development receive more than 2 hours solar access in mid-winter.</p> <p>Apartments and common open spaces of adjacent properties receive more than 4 hours of solar access to residential units and communal open space.</p> | <p>√</p> <p>√</p> <p>√</p> |
| 2D Floor space ratio Aims: <ul style="list-style-type: none"> Ensure that development aligns with the optimum capacity of the site and the desired density of the local area. | <p>The current FSR on the site is 1:1.</p> <p>The proposed FSR of the development is 3:1, with residential FSR of 2:1.</p> | <p>√</p> |
| 2E Building depth Aims: <ul style="list-style-type: none"> Ensure that the bulk of the development relates to the scale of the desired future context. Ensure building depths support apartment layouts that meet the objectives, design criteria and design guidance within the ADG. Controls: <ul style="list-style-type: none"> Range of apartment depths of 12-18m from glass to glass line. | <p>Proposed building depth enables apartment layouts that meet the objectives, design criteria and design guidance of the ADG.</p> | <p>√</p> |
| 2F Building separation Aims: <ul style="list-style-type: none"> To ensure that new development is scaled to support the desired future character, with appropriate massing and spaces between buildings. Assist in providing residential amenity, including visual and acoustic privacy, natural ventilation, sunlight and daylight access and outlook. | <p>Adjacent residential buildings to the east are 2 and 3 storeys in height.</p> | <p>√</p> |

| Development controls | Proposed development | Compliance | | | | | | |
|---|---|---------------------|-----------------|-------|-----------------|-------|--|-------------------|
| <ul style="list-style-type: none"> Provide suitable areas for communal open spaces, deep soil zones and landscaping. Controls: Minimum separation distances for: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Building height</th> <th>Separation distance</th> </tr> </thead> <tbody> <tr> <td>Up to 4 storeys</td> <td>6-12m</td> </tr> <tr> <td>Up to 8 storeys</td> <td>9-18m</td> </tr> </tbody> </table> | Building height | Separation distance | Up to 4 storeys | 6-12m | Up to 8 storeys | 9-18m | <p>Separation distance to buildings (3 storeys) on adjoining eastern site:</p> <ul style="list-style-type: none"> Southern building: 16m from habitable rooms/ balconies of development. Northern building: 13.5m from habitable rooms/ balconies of development. <p>Setback between northern and southern buildings: 25m.</p> | <p>√</p> <p>√</p> |
| Building height | Separation distance | | | | | | | |
| Up to 4 storeys | 6-12m | | | | | | | |
| Up to 8 storeys | 9-18m | | | | | | | |
| 2G Street setbacks Aims: <ul style="list-style-type: none"> Establish the desired spatial proportions of the street and define the street edge. Provide space that can contribute to the landscape character of the street where desired. Assist in achieving visual privacy to apartments from the street. Create good quality entries to lobbies, foyers or individual dwellings. Promote passive surveillance and outlook to the street. | <p>Setback from Marion Street:</p> <ul style="list-style-type: none"> Adjacent aged care facility (to the east) is setback approx. 1.6m from Marion Street boundary line. Proposed building is setback 1.6m from Marion Street boundary line. <p>Setback from Walter Street:</p> <ul style="list-style-type: none"> Adjacent buildings (to the east) are setback 0-3.5m from Walter Street boundary line. Proposed building is setback 6m from Walter Street boundary line. | <p>√</p> <p>√</p> | | | | | | |
| 2H Side and rear setbacks Aims: <ul style="list-style-type: none"> Provide access to light, air and outlook for neighbouring properties and future buildings. Provide adequate privacy between neighbouring apartments. Retain or create a rhythm or pattern of spaces between buildings that define and add character to the streetscape. Achieve setbacks that maximise deep soil areas. | <p>Setback from Eastern boundary:</p> <ul style="list-style-type: none"> Southern building (building/ balconies) is setback 12.5m boundary line. Northern building (building/ balconies) is setback 10m from boundary line. <p>Setbacks along northern and eastern side boundaries enable deep soil planting of medium-sized trees.</p> | <p>√</p> <p>√</p> | | | | | | |

| Development controls | Proposed development | Compliance |
|---|--|------------|
| PART 3: SITING THE DEVELOPMENT | | |
| 3B Orientation Objective 3B-1: Building types and layouts respond to the streetscape and site, while optimising solar access within the development. Objective 3B-2: Overshadowing of neighbouring properties is minimised during mid-winter. | The development is orientated with street frontages to the north and south. Each residence has balconies and living areas located to optimise solar access (north, east and west). The adjacent building to the east generally receives solar access from 9-1.15pm (over 4 hours) in mid-winter. | √ √ |
| 3C Public domain interface Objective 3C-1: Transition between private and public domain is achieved without compromising safety and security. Objective 3C-2: Amenity of the public domain is retained and enhanced. | The proposed development enables balconies of residences to overlook the public domain, public open space and communal areas. The public domain is landscaped and generally screened from neighbouring developments. | √ √ |
| 3D Communal and public open space Objective 3D-1: An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping. <i>Design criteria:</i> <ul style="list-style-type: none"> Communal open space has a minimum area equal 25% of the site. Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9am and 3pm on 21 June. <i>Design guidance:</i> <ul style="list-style-type: none"> Communal open space should have a minimum dimension of 3m. Communal open space should be co-located with deep soil areas. Direct, equitable access should be provided to communal open space from common circulation areas, entries and lobbies. | The proposed development has communal open space of approx. 36.3% of the site area (1893m ²). This excludes landscaped area along the eastern boundary of the site. Communal open space is located at: <ul style="list-style-type: none"> Ground level (at the northern portion of the site). Podium levels. Roof level (above the building "towers"). Between 9am and 3pm on 21 June: <ul style="list-style-type: none"> 100% of Ground Level communal space at the northern portion of the site; 100% of roof top communal open space; & 35% of podium communal open space. | √ √ |

| Development controls | Proposed development | Compliance |
|--|---|------------|
| <ul style="list-style-type: none"> Where communal open space cannot be provided at ground level: <ul style="list-style-type: none"> It should be provided on a podium or roof. Larger balconies or increased private open space for apartments be provided. Demonstrate good proximity to public open space and facilities. | 63 out of 97 residential units have larger balconies/ private open space (than ADG minimum requirements), which amounts to 65% of residences. Moreover, Lambert Park is located directly south of the site. | √ |
| Objective 3D-2: Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting. | Communal open space incorporates a range of passive recreation opportunities, which will be developed at detailed design stage. | √ |
| Objective 3D-3: Communal open space is designed to maximise safety. | Roof top and podium communal open spaces will provide a range of passive recreational facilities. Podium open space will be overlooked by some residences. Roof top spaces will be designed for safety as well as privacy for communal activities. | √ √ |
| 3E Deep soil zones Objective 3E-1: Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality. <i>Design criteria:</i> Deep soil zones are to meet the following minimum requirements for site area – greater than 1,500m ² : <ul style="list-style-type: none"> Deep soil zone – 7%. Minimum dimension – 6m. Achieving this requirement may not been possible for sites with non-residential uses at Ground Floor Level. | Required area of deep soil: 5,210m ² x 7% = 365m ² . Proposed deep soil zones at Ground Level with minimum dimension between 3-6m: 620m ² approx., which amounts to 11.8%. | √ √ |

| Development controls | Proposed development | Compliance | | | | | | | | | | | | | | | | | | | | | |
|--|--|-----------------------------|---------------------|-----------------------|----|----|-------------------------|----|------|---|--|------------|------------|--------|-------|-----|------|------|------|----|------|------|------------|
| 3F Visual privacy (overrides local DCP) Objective 3F-1: Adequate building separation distances are shared equitably between neighbouring sites to achieve reasonable levels of external and internal visual privacy. <i>Design criteria:</i> <ul style="list-style-type: none"> Minimum required separation distances between windows and balconies of habitable rooms to side and rear boundaries: <table border="1"> <thead> <tr> <th>Building height</th> <th>Habitable rooms & balconies</th> <th>Non-habitable rooms</th> </tr> </thead> <tbody> <tr> <td>Up to 12m (4 storeys)</td> <td>6m</td> <td>3m</td> </tr> <tr> <td>Up to 25m (5-8 storeys)</td> <td>9m</td> <td>4.5m</td> </tr> </tbody> </table> <ul style="list-style-type: none"> No separation required between blank walls. Objective 3F-2: Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space. | Building height | Habitable rooms & balconies | Non-habitable rooms | Up to 12m (4 storeys) | 6m | 3m | Up to 25m (5-8 storeys) | 9m | 4.5m | Separation between buildings complies with ADG minimum requirements. Distance between habitable rooms of adjacent buildings (to the east): <table border="1"> <thead> <tr> <th></th> <th>South Bldg</th> <th>North Bldg</th> </tr> </thead> <tbody> <tr> <td>L2 & 3</td> <td>12.5m</td> <td>10m</td> </tr> <tr> <td>L4-7</td> <td>14.5</td> <td>12.5</td> </tr> <tr> <td>L8</td> <td>16.5</td> <td>13.5</td> </tr> </tbody> </table> | | South Bldg | North Bldg | L2 & 3 | 12.5m | 10m | L4-7 | 14.5 | 12.5 | L8 | 16.5 | 13.5 | √ √ |
| | Building height | Habitable rooms & balconies | Non-habitable rooms | | | | | | | | | | | | | | | | | | | | |
| Up to 12m (4 storeys) | 6m | 3m | | | | | | | | | | | | | | | | | | | | | |
| Up to 25m (5-8 storeys) | 9m | 4.5m | | | | | | | | | | | | | | | | | | | | | |
| | South Bldg | North Bldg | | | | | | | | | | | | | | | | | | | | | |
| L2 & 3 | 12.5m | 10m | | | | | | | | | | | | | | | | | | | | | |
| L4-7 | 14.5 | 12.5 | | | | | | | | | | | | | | | | | | | | | |
| L8 | 16.5 | 13.5 | | | | | | | | | | | | | | | | | | | | | |
| 3G Pedestrian access and entries Objective 3G-1: Building entries and pedestrian access connects to and addresses the public domain. Objective 3G-2: Access, entries and pathways are accessible and easy to identify. Objective 3G-3: Large sites provide pedestrian links for access to streets and connection to destination. | Objective 3G-1: Building entries front and connect to common driveway. Objective 3G-2: Entries are accessible and easy to identify. Objective 3G-3: Pedestrian access is provided between Marion and Walter Streets. | √ √ √ | | | | | | | | | | | | | | | | | | | | | |

| Development controls | Proposed development | Compliance |
|--|--|---|
| 3H Vehicle access Objective 3H-1: Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes. <i>Design guidance:</i> <ul style="list-style-type: none"> Integrate car park access with the building's overall façade. Locate car park entries behind the building line. Locate vehicular access on secondary streets. Clear sight lines should be provided at pedestrian and vehicle crossings. Pedestrian and vehicle access should be separated and distinguishable. Garbage collection, loading and servicing areas are screened. | Vehicle access is separated from pedestrian walkways, providing pedestrian safety and minimise conflicts. Car park area is integrated with the building's design and façade and not visible from the street. Access to and egress from site's vehicular driveway is from Marion Street. Pedestrian and vehicular lanes are separated for safety of access. | √ √ √ |
| | 3J Bicycle and car parking Objective 3J-1: Car parking is provided based on proximity to public transport in metropolitan Sydney. Objective 3J-2: Parking and facilities are provided for other modes of transport (e.g. motorbikes & bicycles). Objective 3J-3: Car park design and access is safe and secure. Objective 3J-4: Visual and environmental impacts of underground car parking are minimised. Objective 3J-5: Visual and environmental impacts of on-grade car parking are minimised. | Car parking complies with Leichhardt DCP. Enclosed and secure parking spaces will be provided for bicycles and motor bikes. Secure parking area is provided, accessed from site's driveway which is accessed from Marion Street. Underground car parking entrance is not visible from the street. Driveway is screened from adjacent residential facility with landscaping and trees. |

| Development controls | Proposed development | Compliance |
|--|--|-------------------------------|
| PART 4: DESIGNING THE BUILDING | | |
| 4A Solar and daylight access (overrides local DCP) Objective 4A-1: To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space. <i>Design criteria:</i> <ul style="list-style-type: none"> Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9am and 3pm at mid-winter. A maximum of 15% of apartments of a building receive no direct sunlight between 9am and 3pm at mid-winter. | Living rooms and private open spaces of apartments receive at least 2 hours of direct sunlight between 9am-3pm in mid-winter. All apartments receive sunlight between 9am and 3pm in mid-winter. | ✓ ✓ |
| 4B Natural ventilation (overrides local DCP) Objective 4B-1: All habitable rooms are naturally ventilated. Objective 4B-2: The layout and design of single aspect apartments maximises natural ventilation. Objective 4B-3: The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents. <i>Design criteria:</i> <ul style="list-style-type: none"> At least 60% of apartments are naturally cross ventilated in the first 9 storeys of the building. Overall depth of a cross-through apartment does not exceed 18m. | All habitable rooms are to be naturally ventilated. All apartments have natural ventilation. <ul style="list-style-type: none"> 73% of apartments are cross ventilated. 27% of apartments do not have cross-ventilation, but have natural ventilation. Depth of cross-through apartment does not exceed 18m measured glass to glass line. | ✓ ✓ ✓ ✓ ✓ |
| 4C Ceiling heights (overrides local DCP) Objective 4C-1: Ceiling heights achieves sufficient natural ventilation and daylight access. <i>Design criteria:</i> Minimum ceiling height for: <ul style="list-style-type: none"> Habitable rooms: 2.7m Non-habitable rooms: 2.4m | Ceiling heights comply. | ✓ |

| Development controls | Proposed development | Compliance | | | | | | | | | | |
|--|--|------------------------------|--------|------------------|-----------|------------------|-----------|------------------|-----------|------------------|---|---|
| 4D Apartment size and layout (overrides local DCP) Objective 4D-1: The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity. <i>Design criteria:</i> <ul style="list-style-type: none"> Apartments are required to have the following minimum internal areas: <table border="1"> <thead> <tr> <th>Apartment type</th> <th>Minimum internal area</th> </tr> </thead> <tbody> <tr> <td>Studio</td> <td>35m²</td> </tr> <tr> <td>1 bedroom</td> <td>50m²</td> </tr> <tr> <td>2 bedroom</td> <td>75m²</td> </tr> <tr> <td>3 bedroom</td> <td>90m²</td> </tr> </tbody> </table> <ul style="list-style-type: none"> Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms. Objective 4D-2: Environmental performance of the apartment is maximised. <i>Design criteria:</i> <ul style="list-style-type: none"> Habitable room depths are limited to a maximum of 2.5 x the ceiling height. In open plan layouts (where the living, dining and kitchen are combined) – the maximum habitable room depth is 8m from a window. | Apartment type | Minimum internal area | Studio | 35m ² | 1 bedroom | 50m ² | 2 bedroom | 75m ² | 3 bedroom | 90m ² | Apartments exceed the minimum internal area requirements. The windows in the apartments can comply. Layouts of apartments comply. | ✓ ✓ ✓ |
| Apartment type | Minimum internal area | | | | | | | | | | | |
| Studio | 35m ² | | | | | | | | | | | |
| 1 bedroom | 50m ² | | | | | | | | | | | |
| 2 bedroom | 75m ² | | | | | | | | | | | |
| 3 bedroom | 90m ² | | | | | | | | | | | |
| Objective 4D-3: Apartments are designed to accommodate a variety of household activities and needs. <i>Design criteria:</i> <ul style="list-style-type: none"> Master bedrooms have a minimum of 10m² and other bedrooms 9m² (excluding wardrobe space). Bedrooms have a minimum dimension of 3m (excluding wardrobe space). Combined living and dining rooms have a minimum width of 4m for 2 and 3 bedroom apartments. The width of cross-through apartments is at least 4m internally. | To comply. Apartment designs comply. Apartment designs comply. Cross-through apartments comply. | ✓ ✓ ✓ ✓ | | | | | | | | | | |

| Development controls | Proposed development | Compliance | | | | | | | | | | | | | | | |
|--|---|----------------------------|---------------|--------|-----------------|---|-----------|-----------------|----|------------|------------------|----|-------------|------------------|------|--|-------------------------------------|
| <p>AI Private open space and balconies (overrides DCP)</p> <p>Objective 4E-1: Apartments provide appropriately sized private open space and balconies to enhance residential amenity.</p> <p><i>Design criteria:</i> All apartments are required to have primary balconies as follows:</p> <table border="1"> <thead> <tr> <th>Dwelling type</th> <th>Minimum area</th> <th>Minimum depth</th> </tr> </thead> <tbody> <tr> <td>Studio</td> <td>4m²</td> <td>-</td> </tr> <tr> <td>1 bedroom</td> <td>8m²</td> <td>2m</td> </tr> <tr> <td>2 bedrooms</td> <td>10m²</td> <td>2m</td> </tr> <tr> <td>3+ bedrooms</td> <td>12m²</td> <td>2.4m</td> </tr> </tbody> </table> <p>Objective 4E-2: Primary private open space and balconies are appropriately located to enhance liveability for residents.</p> <p>Objective 4E-3: Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building.</p> <p>Objective 4E-4: Private open space and balcony design maximises safety.</p> | Dwelling type | Minimum area | Minimum depth | Studio | 4m ² | - | 1 bedroom | 8m ² | 2m | 2 bedrooms | 10m ² | 2m | 3+ bedrooms | 12m ² | 2.4m | <p>Apartments comply with requirements.</p> <p>Balconies/ private open spaces are located adjacent to living areas of apartments.</p> <p>The design of balconies is integrated with the architectural design of the building.</p> <p>Balconies front the public street/ lane for passive surveillance.</p> | <p>√</p> <p>√</p> <p>√</p> <p>√</p> |
| Dwelling type | Minimum area | Minimum depth | | | | | | | | | | | | | | | |
| Studio | 4m ² | - | | | | | | | | | | | | | | | |
| 1 bedroom | 8m ² | 2m | | | | | | | | | | | | | | | |
| 2 bedrooms | 10m ² | 2m | | | | | | | | | | | | | | | |
| 3+ bedrooms | 12m ² | 2.4m | | | | | | | | | | | | | | | |
| <p>4F Common circulation and spaces (overrides DCP)</p> <p>Objective 4F-1: Common circulation spaces achieve good amenity and property service the number of apartments.</p> <p><i>Design criteria:</i></p> <ul style="list-style-type: none"> The maximum number of apartments off a circulation core on a single level is 8. Where a development is unable to achieve the design criteria, a high level of amenity for common lobbies, corridors and apartments should be provided, including: <ul style="list-style-type: none"> Sunlight and natural cross ventilation in apartments. | <p>Apartments on L4-8 comply.</p> <p>Apartments on L2 & 3, as cross-over apartments have more than 8 dwellings off a single circulation core.</p> <p>Amenity features include:</p> <ul style="list-style-type: none"> Majority of apartments have natural cross ventilation. All apartments receive sunlight. | <p>√</p> <p>X</p> <p>√</p> | | | | | | | | | | | | | | | |

| Development controls | Proposed development | Compliance | | | | | | | | | | |
|---|---|----------------------------|--------|-----------------|-----------|-----------------|------------|-----------------|-------------|------------------|---|-------------------|
| <ul style="list-style-type: none"> Access to ample daylight and natural ventilation in common circulation spaces. Common areas for seating and gathering; Generous corridors with greater than minimum ceiling heights; etc. <p>Objective 4F-2: Common circulation spaces promote safety and provide for social interaction between residents.</p> | <ul style="list-style-type: none"> Daylight and natural ventilation to common circulation spaces. All corridors have 2.7m high ceiling height. <p>Direct and legible access provided to apartments.</p> <p>Circulation spaces will be well lit.</p> | <p>√</p> <p>√</p> <p>√</p> | | | | | | | | | | |
| <p>4G Storage (overrides local DCP)</p> <p>Objective 4G-1: Adequate storage is provided in each apartment.</p> <p><i>Design criteria:</i> In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:</p> <table border="1"> <thead> <tr> <th>Dwelling type</th> <th>Storage (volume)</th> </tr> </thead> <tbody> <tr> <td>Studio</td> <td>4m²</td> </tr> <tr> <td>1 bedroom</td> <td>6m²</td> </tr> <tr> <td>2 bedrooms</td> <td>8m²</td> </tr> <tr> <td>3+ bedrooms</td> <td>10m²</td> </tr> </tbody> </table> <ul style="list-style-type: none"> At least 50% of the required storage is to be located within the apartment. <p>Objective 4G-2:</p> <ul style="list-style-type: none"> Additional storage is conveniently located, accessible and nominated for individual apartments. Storage not located in an apartment is integrated into the overall building design and not visible from the public domain. | Dwelling type | Storage (volume) | Studio | 4m ² | 1 bedroom | 6m ² | 2 bedrooms | 8m ² | 3+ bedrooms | 10m ² | <p>To be provided within apartments and basement levels.</p> <p>Can comply.</p> | <p>√</p> <p>√</p> |
| Dwelling type | Storage (volume) | | | | | | | | | | | |
| Studio | 4m ² | | | | | | | | | | | |
| 1 bedroom | 6m ² | | | | | | | | | | | |
| 2 bedrooms | 8m ² | | | | | | | | | | | |
| 3+ bedrooms | 10m ² | | | | | | | | | | | |
| <p>4H Acoustic privacy</p> <p>Objective 4H-1: Noise transfer is minimised through siting of buildings and building layout.</p> <p>Objective 4H-2: Noise impacts are mitigated within apartments through layouts and acoustic treatments.</p> | <p>Building separation complies with <i>Apartment Design Guide</i>.</p> <p>Intertenancy walls will be acoustically insulated at minimum to NCC requirements.</p> | <p>√</p> <p>√</p> | | | | | | | | | | |

| Development controls | | Proposed development | Compliance | | | | | | | | | | | | | | | | | | |
|----------------------|--|---|---------------|---------------|---|--------|---|------|-----------|----|-------|------------|----|-------|------------|----|------|------------|---|-------|---|
| 4J | Noise and pollution Objective 4J-1: External noise and pollution are minimised through the careful siting and layout of buildings. | Noted. | | | | | | | | | | | | | | | | | | | |
| | Objective 4J-2: Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission. | Noted. | | | | | | | | | | | | | | | | | | | |
| 4K | Apartment mix Objective 4K-1: A range of apartment types and sizes is provided to cater for different household types. | The development proposes: <table border="1"> <thead> <tr> <th>Dwelling type</th> <th>Apartment no.</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Studio</td> <td>2</td> <td>2/06</td> </tr> <tr> <td>1 bedroom</td> <td>22</td> <td>22.68</td> </tr> <tr> <td>2 bedrooms</td> <td>56</td> <td>57.73</td> </tr> <tr> <td>3 bedrooms</td> <td>16</td> <td>16.5</td> </tr> <tr> <td>4 bedrooms</td> <td>1</td> <td>1.03%</td> </tr> </tbody> </table> | Dwelling type | Apartment no. | % | Studio | 2 | 2/06 | 1 bedroom | 22 | 22.68 | 2 bedrooms | 56 | 57.73 | 3 bedrooms | 16 | 16.5 | 4 bedrooms | 1 | 1.03% | √ |
| | Dwelling type | Apartment no. | % | | | | | | | | | | | | | | | | | | |
| Studio | 2 | 2/06 | | | | | | | | | | | | | | | | | | | |
| 1 bedroom | 22 | 22.68 | | | | | | | | | | | | | | | | | | | |
| 2 bedrooms | 56 | 57.73 | | | | | | | | | | | | | | | | | | | |
| 3 bedrooms | 16 | 16.5 | | | | | | | | | | | | | | | | | | | |
| 4 bedrooms | 1 | 1.03% | | | | | | | | | | | | | | | | | | | |
| | Objective 4K-2: The apartment mix is distributed to suitable locations within the building. | Apartment mix is generally evenly distributed within each level. | √ | | | | | | | | | | | | | | | | | | |
| 4M | Facades Objective 4M-1: Building facades provide visual interest along the street while respecting the character of the local area. | Building facades are articulated to provide visual interest. | √ | | | | | | | | | | | | | | | | | | |
| | Objective 4M-2: Building functions are expressed in the façade treatment. | Building entries are clearly defined. Apartments are expressed to convey a residential character. | √ | | | | | | | | | | | | | | | | | | |
| 4N | Roof design Objective 4N-1: Roof treatments are integrated into the building design and positively respond to the street. | The roof is landscaped with planters bordering the perimeter of the roof. | √ | | | | | | | | | | | | | | | | | | |
| | Objective 4N-2: Opportunities to use roof space for residential accommodation and open space maximised. | The development has: <ul style="list-style-type: none"> ▪ Penthouse apartments at uppermost level with terraces; and ▪ Roof gardens as communal open space. | √ | | | | | | | | | | | | | | | | | | |

| Development controls | | Proposed development | Compliance | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|--|-------------|----------------------|------------|-----------|-------------|-------------------------------|-------------------|---------|--------------------|--------------|-----------------------------|------------------|---------|------------------|-------------|----------------------------|------------------|--------|----------------------|--------|--|--|------------|--|--------------|--|--|------------|--|------|--|--|--------|--|
| | Objective 4N-3: Roof design incorporates sustainability features. | The roof incorporates photovoltaic cells. | √ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4O | Landscape design Objective 4O-1: Landscape design is viable and sustainable. | Landscape design will be environmentally sustainable to enhance the environmental performance of the buildings and development, incorporating features to include: <ul style="list-style-type: none"> ▪ Diverse and appropriate planting; ▪ Bio-filtration gardens; ▪ Shade trees – appropriate for orientation and microclimate control; ▪ Community gardens; ▪ Green roofs and walls; and ▪ Shade structures. | √ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Objective 4O-2: Landscape design contributes to the streetscape and amenity. | Landscape design (shade trees) are proposed along Walter Street and eastern boundary setback areas. Trees can be planted along Marion Street frontage. | √ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4P | Planting on structures Objective 4P-1: Appropriate soil profiles are provided with minimum soil standards for plant size: | Noted. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>Plant type</th> <th>Description</th> <th>Soil volume</th> <th>Soil depth</th> <th>Soil area</th> </tr> </thead> <tbody> <tr> <td>Large trees</td> <td>12-18m high – up to 16m crown</td> <td>150m³</td> <td>1200m m</td> <td>10 x 10 (or equal)</td> </tr> <tr> <td>Medium trees</td> <td>8-12m high – up to 8m crown</td> <td>35m³</td> <td>1000m m</td> <td>6 x 6 (or equal)</td> </tr> <tr> <td>Small trees</td> <td>6-8m high – up to 4m crown</td> <td>9 m³</td> <td>800m m</td> <td>3.5 x 3.5 (or equal)</td> </tr> <tr> <td>Shrubs</td> <td></td> <td></td> <td>500-600m m</td> <td></td> </tr> <tr> <td>Ground cover</td> <td></td> <td></td> <td>300-450m m</td> <td></td> </tr> <tr> <td>Turf</td> <td></td> <td></td> <td>200m m</td> <td></td> </tr> </tbody> </table> | Plant type | Description | Soil volume | Soil depth | Soil area | Large trees | 12-18m high – up to 16m crown | 150m ³ | 1200m m | 10 x 10 (or equal) | Medium trees | 8-12m high – up to 8m crown | 35m ³ | 1000m m | 6 x 6 (or equal) | Small trees | 6-8m high – up to 4m crown | 9 m ³ | 800m m | 3.5 x 3.5 (or equal) | Shrubs | | | 500-600m m | | Ground cover | | | 300-450m m | | Turf | | | 200m m | |
| Plant type | Description | Soil volume | Soil depth | Soil area | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Large trees | 12-18m high – up to 16m crown | 150m ³ | 1200m m | 10 x 10 (or equal) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Medium trees | 8-12m high – up to 8m crown | 35m ³ | 1000m m | 6 x 6 (or equal) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Small trees | 6-8m high – up to 4m crown | 9 m ³ | 800m m | 3.5 x 3.5 (or equal) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shrubs | | | 500-600m m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ground cover | | | 300-450m m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Turf | | | 200m m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Objective 4P-2: Plant growth is optimised with appropriate selection and maintenance. | Appropriate plant species will be selected. | √ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Development controls | | Proposed development | Compliance |
|----------------------|--|--|------------|
| | Objective 4P-3: Planting on structures contributes to the quality and amenity of communal and public open spaces. | Development has planting on terraces and roof garden. | √ |
| 4Q | Universal design Objective 4Q-1: Universal design features are included in apartment design to promote flexible housing for all communities. <i>Design guidance:</i> Developments achieve a benchmark of 20% of the total apartments incorporating <i>Liveable Housing Guideline's Silver Level</i> universal design features. | All apartments are able to achieve Silver Level universal design features. | √ |
| | Objective 4Q-2 A variety of apartments with adaptable designs are provided. <i>Design guidance:</i> Adaptable housing should be provided in accordance with the relevant council policy. Design solutions for adaptable apartments include: <ul style="list-style-type: none"> ▪ Convenient access to communal and public areas; ▪ High level of solar access; ▪ Minimal structural change and residential amenity loss when adapted; ▪ Larger car parking spaces for accessibility. | To comply at DA stage. | |
| | Objective 4Q-3: Apartment layouts are flexible and accommodate a range of lifestyle needs. | Apartments designed to be flexible with sizes to accommodate single to family living. | √ |
| 4S | Mixed use Objective 4S-1: Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement. | Employment uses (urban services, retail and commercial) are located in proximity to the light rail station, at Ground Floor Level (L1) fronting Marion and Walter Streets, as well as internal roadway | √ |

| Development controls | | Proposed development | Compliance |
|----------------------|---|---|------------|
| | Objective 4S-2: Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents. | <ul style="list-style-type: none"> ▪ Residential entries are separated from commercial entries. ▪ Residential entries are directly accessible from internal roadway. ▪ Commercial service areas are separated from residential components. ▪ Landscaped communal open space are predominantly provided at podium and roof terraces. | √ |
| 4T | Awnings and signage Objective 4T-1: Awnings are well located and complement and integrate with the building design | A continuous colonnade is located at Ground Level adjacent to glazed shopfronts. | √ |
| 4U | Energy efficiency Objective 4U-1: Development incorporates passive environmental design. | The design is oriented to enable each apartment to receive optimum solar access and natural ventilation. | √ |
| | Objective 4U-2: Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer. <i>Design guidance:</i> <ul style="list-style-type: none"> ▪ Use of smart glass or other technologies on north and west elevations. ▪ Thermal mass in floors and walls. ▪ Polished concrete floors, tiles or timber rather than carpet. ▪ Insulated roofs walls and floors. ▪ Seals to windows and doors. ▪ Overhangs and shading devices. | Photovoltaic solar cells are proposed to be located at roof terrace. Building design incorporates deep overhangs and shading devices to eastern, western and northern facades. | √ √ |
| | Objective 4U-3: Adequate natural ventilation minimises the need for mechanical ventilation. <i>Design guidance:</i> <ul style="list-style-type: none"> ▪ Natural cross ventilation for apartments is optimised. ▪ Natural ventilation provided to all habitable rooms and to many non-habitable rooms/ circulation spaces. | Building design optimises cross ventilation with natural ventilation to all habitable rooms. Common corridors can be naturally ventilated. | √ √ |

| Development controls | | Proposed development | Compliance |
|----------------------|---|--|------------|
| 4V | <p>Water management and conservation</p> <p>Objective 4V-1: Potable water use is minimised.</p> <p><i>Design guidance:</i></p> <ul style="list-style-type: none"> ▪ Water efficient fittings, appliances and waste water reuse should be incorporated. ▪ Apartments should be individually metered. ▪ Rainwater should be collected, stored and reused on site. ▪ Drought tolerant plants to be used in landscaped areas. | Water management and Water Sensitive Urban Design strategies and measures will be implemented. | √ |
| | <p>Objective 4V-2: Urban stormwater is treated on site before being discharged to receiving waters.</p> | For future resolution. | |
| | <p>Objective 4V-3: Flood management systems are integrated into site design (e.g. detention tanks).</p> | For future resolution. | |
| 4W | <p>Waste management</p> <p>Objective 4W-1: Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents.</p> | For future resolution. | |
| | <p>Objective 4W-2: Domestic waste is minimised by providing safe and convenient source separation and recycling.</p> | For future resolution. | |
| 4X | <p>Building maintenance</p> <p>Objective 4X-1: Building design detail provides protection from weathering.</p> | For future resolution. | |
| | <p>Objective 4X-2: Systems and access enable ease of maintenance.</p> | For future resolution. | |
| | <p>Objective 4X-3: Material selection reduces ongoing maintenance costs.</p> | For future resolution. | |