



Prepared for:
NSW Land and Housing Corporation

Date:
12 February 2019

Urban Design Report

63-67 West Parade West Ryde

architectus™

Contents

| | | | |
|-----------------------------------|-----------|--|-----------|
| Executive Summary | 3 | Chapter 5 Assessment | 35 |
| Chapter 1 Introduction | 5 | Building separation | 36 |
| Site overview | 6 | Solar access | 38 |
| Local character | 7 | Solar and cross ventilation compliance | 40 |
| Site analysis | 8 | Shadow Analysis | 45 |
| Key findings | 10 | Visual Impact Assessment | 46 |
| Recent development | 11 | Chapter 6 Recommendations | 49 |
| Chapter 2 Planning context | 13 | Proposed concept plan | 50 |
| Strategic planning context | 14 | Design controls | 51 |
| Statutory planning context | 18 | Conclusion | 53 |
| Concept plan approval | 20 | Appendix A Reference design | 55 |
| Chapter 3 Design approach | 23 | | |
| Design objectives | 24 | | |
| Architecture objectives | 26 | | |
| Chapter 4 The proposal | 29 | | |
| Proposed modification | 30 | | |
| Reference Design | 32 | | |
| Apartment Design Guide Summary | 33 | | |

Executive Summary

This report has been prepared to support a modification application to a Concept Plan Approval (MP09-0029) at 63-77 West Parade, West Ryde.

The Concept Plan Approval was granted on 18 June 2010 under Section 75P(1)(a) of the *Environmental Planning and Assessment Act 1979*. On 15 June 2015, the approval was extended via a modification under section 75W to 15 June 2018.

The proposed modification seeks to modify the Concept Plan Approval to reflect a revised mix of uses, consistent with current NSW Government policy in relation to social housing. The modification will also ensure future development can comply with current design standards in the Apartment Design Guide (ADG). Specifically, the modification aims to:

- Remove the proposed commercial and retail uses, and amend the residential GFA to reflect the changed use mix;
- Introduce a mix of social and affordable housing that is consistent with *Future Directions for Social Housing in NSW*;
- Amend the proposal to achieve compliance with the ADG;
- Extend the approval for a period of two years from June 2018.

Need for the modification

Commercial and retail uses

The proposed modification seeks to remove the approved commercial and retail floorspace. The proposed modification will remove the 619 square metres of commercial space and 71 square metres of retail floorspace.

The removal of commercial and retail floorspace is required, as at the time of approval, the NSW Government had plans for a Family and Community Services (FACS) to locate an office within the development. However, since that time FACS have found alternate office accommodation and the office space is no longer required. Additionally, since the approval in 2010,

there has been a change in policy, and the presence of a FACS office within the development would not be conducive to a fully integrated development where the social housing component is indistinguishable from the private housing.

The modification to the Concept Plan would result in a residential outcome for the site, which is consistent with the R4 High Density Residential zone, and the existing residential neighbourhood character.

Housing mix

In 2016, the NSW Government released the *Future Directions for Social Housing in NSW*, which aims to create more integrated and better quality social and affordable housing. The principle of a 70:30 split was introduced in this policy to allow a more integrated approach to the deliver of social housing.

The Future Directions policy stipulates major developments should aim for a private to social mix of 70:30. The modification will bring the development in line with current Government policy in relation to social housing. The proposal will provide for more integrated approach to social housing, aiming to deliver a 70:30 split of private and social housing on the site.

Apartment Design Guide

The original Concept Plan Approval was determined in 2010, prior to the introduction of the ADG.

State Environmental Planning Policy No 65 - Design Quality of Residential Apartment Development was reviewed in 2015 and replaced the Residential Flat Design Code with the ADG. While the provisions of the Concept Approval comply with the Residential Flat Code, the preferred approach is to modify the approval to achieve compliance with current design standards under the ADG.

The proposed modification has been developed and tested to ensure consistency with the ADG. Modifying the approval will ensure future development can comply with the requirements in the ADG, and will result in greater residential amenity, and improved design outcomes for the site.

Proposed modification

The proposed modification does not seek any increase to the total approved GFA of 13,149 square metres. The proposed modification seeks to redistribute the approved commercial and retail floorspace, of 619 square metres and 71 square metres respectively, to residential GFA. This will result is an increase in residential GFA from 12,459 square metres to 13,149 square metres.

Proposed building envelope

In order to maximise flexibility in designing the future built form, the approved building envelope has been simplified to a building area, within which the approved GFA and ADG compliance, can be achieved. This approach will ensure a flexible and adaptable building area, to enable a high-quality design response for the site.

The proposed modification includes a slightly expanded building envelope from the existing approval. The expanded building area, will not only facilitate improved residential design outcomes in line with the ADG, but will allow greater design variation through the development partnership process.

The proposed building area will ensure residential amenity is protected and enhanced, and includes a consistent front setback to ensure future development is consistent with the local streetscape character and residential amenity along West Parade.

The proposed building area will not facilitate any increase in residential density. Despite the proposed building area expanding to accommodate better design outcomes and increased flexibility, the total approved GFA of 13,149 square metres will not increase.

Proposed heights

The proposed modification does not seek any increase to the approved maximum building height of 12 storeys. However, the proposal does seek to create three height zones across the site, ranging from 6, 9 and 12 storeys. The three heights zones require a minor change to the approved building heights of 5 and 8 storeys, with no change to the maximum height of 12 storeys.

The additional height can be accommodated with no additional impacts to adjoining properties, and will enable future buildings to comply with the requirements of ADG.

Reference design

To ensure future development can be accommodated within the proposed building area, an assessment of a reference design prepared by AJC has been undertaken. AJC's design demonstrates that future development can be accommodated within he proposed building area, within the approved GFA of 13,159 square metres, and can meet the requirements of SEPP 65 and the ADG.

The proposed modification does not seek approval for the reference design, however, the reference designed has been used as the basis of the assessment in this report, including compliance with the ADG.

Design objectives

To ensure the highest quality development, and to support the proposed modification, design objectives and design controls have been developed to inform the future built form and development outcomes on the site.

The design controls provide additional guidance on matters such as height, massing, setbacks, residential entries, communal open space, and street frontage. It is intended that the design controls will be addressed in future project specific development applications for the site.

Chapter 1

Introduction

Site overview

Purpose of this report

This Urban Design Report has been prepared to support a modification to a Mixed Use Development Concept Plan, at 63-77 West Parade, West Ryde.

This proposed modification seeks to modify the Concept Plan Approval to reflect a revised mix of uses and to ensure the approval is consistent with the current NSW Government policy in relation to social housing. The modification also aims to bring the development in line with current apartment design standards that were not in place in 2010. Specifically the proposal seeks to:

- Remove the proposed commercial and retail uses, and amend the residential GFA to reflect the changed use mix
- Introduce a mix of social and affordable housing that is consistent with the Future Directions for Social Housing in NSW
- Amend the proposal to achieve compliance with the Apartment Design Guidelines
- Extend the approval for a period of two years from June 2018.

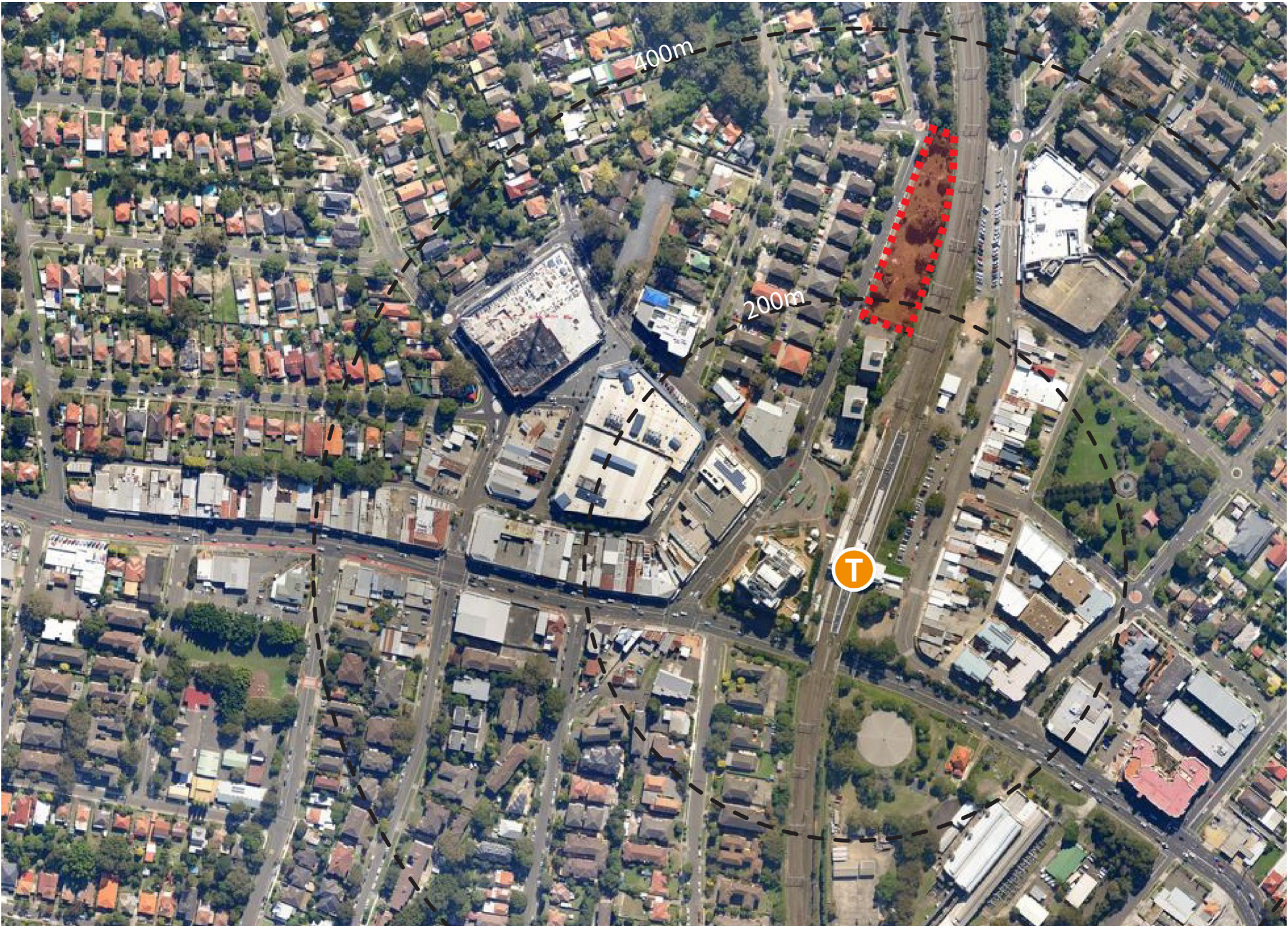
Site overview

The subject site comprises 8 lots located at 63-77 West Parade, West Ryde (Lots 1-8 DP19985), comprising a total area of 3,735 square metres .

The site is highly accessible being a walkable distance from train, bus and taxi services at West Ryde Railway Station, located approximately 200m south of the site.

The site is located within the City of Ryde, and directly adjoins the West Ryde Town Centre, which features an array of community facilities, retail services and local shops.

The site's strategic location within West Ryde is enhanced by strong connections to a variety of employment and educational precincts located at Macquarie Park and Parramatta.



Key



Subject Site



Walking Catchment



West Ryde Railway Station

Local character



West Ryde Railway Station (West Parade) platform entrance



Bus interchange located at West Ryde Railway Station (West Parade)



'Opal-activated' secure bike storage shed located adjacent to West Ryde Railway Station (West Parade)



8-storey mixed use development with ground floor supermarket from West Ryde Village Square



West Ryde Community Centre located on Anthony Road



West Ryde Library on Graf Avenue



Streetscape character along Graf Avenue



Looking east along Graf Avenue



Looking south down West Parade towards West Ryde Railway Station and Victoria Road



Subject site looking south towards adjacent 8 and 9 storey residential flat buildings

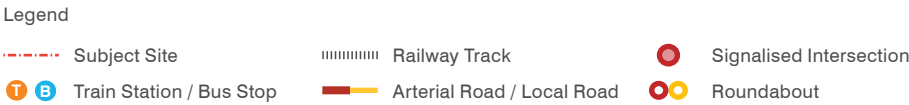
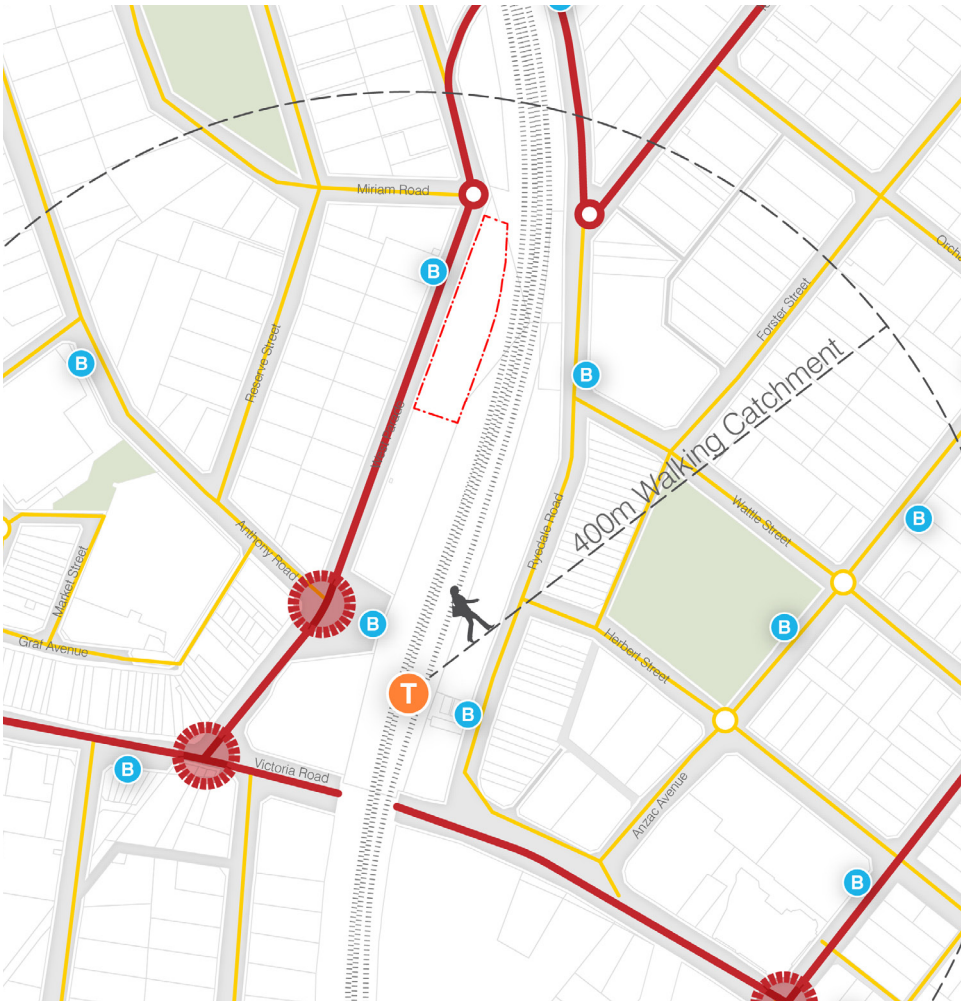


8 and 9 storey residential flat buildings located to the south of subject site on West Parade



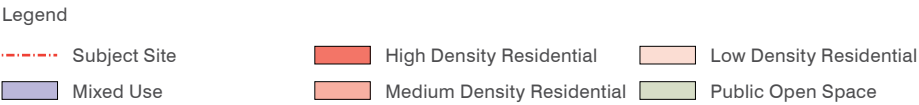
Local retail and fine grain character along Anthony Lane

Site analysis



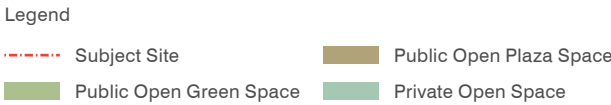
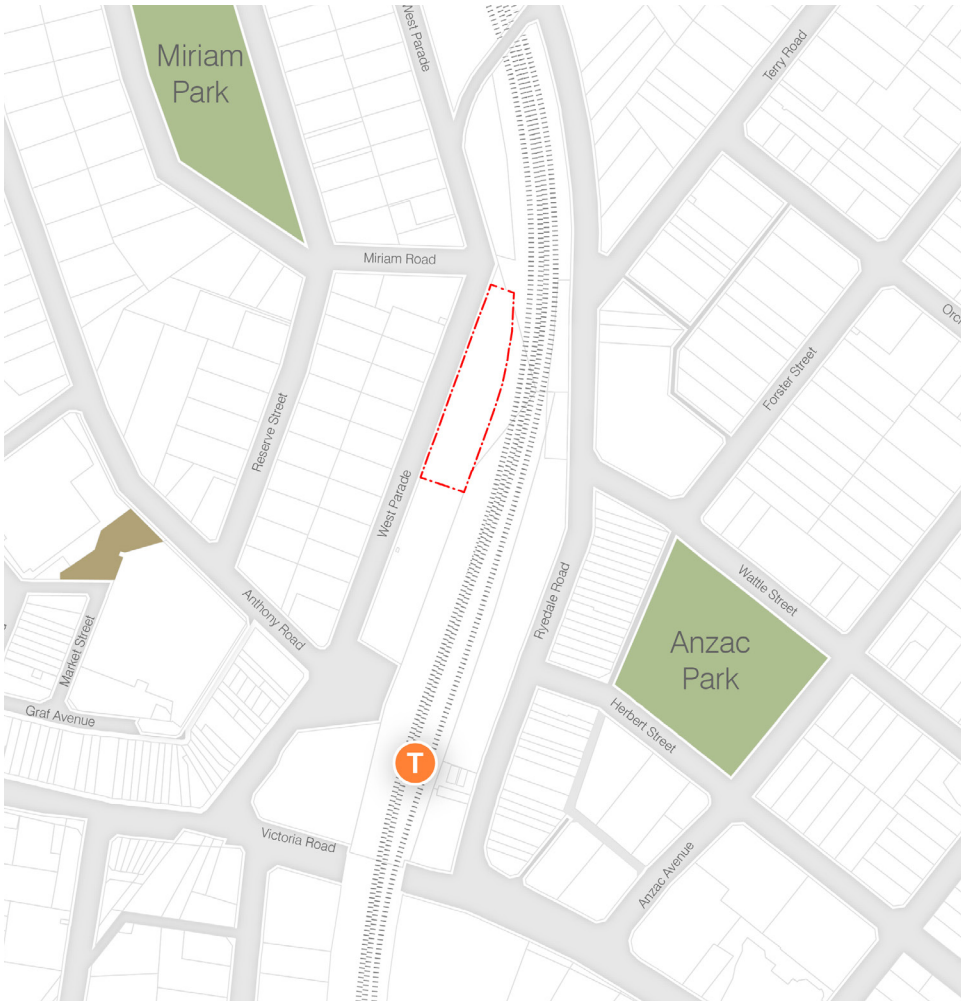
Access and Movement

The subject site is located on West Parade, which connects to Victoria Road in the south, a to key transport corridor. The site has excellent public transport accessibility, being within 200m of West Ryde Train Station, the bus interchange, and regular bus services along West Parade.



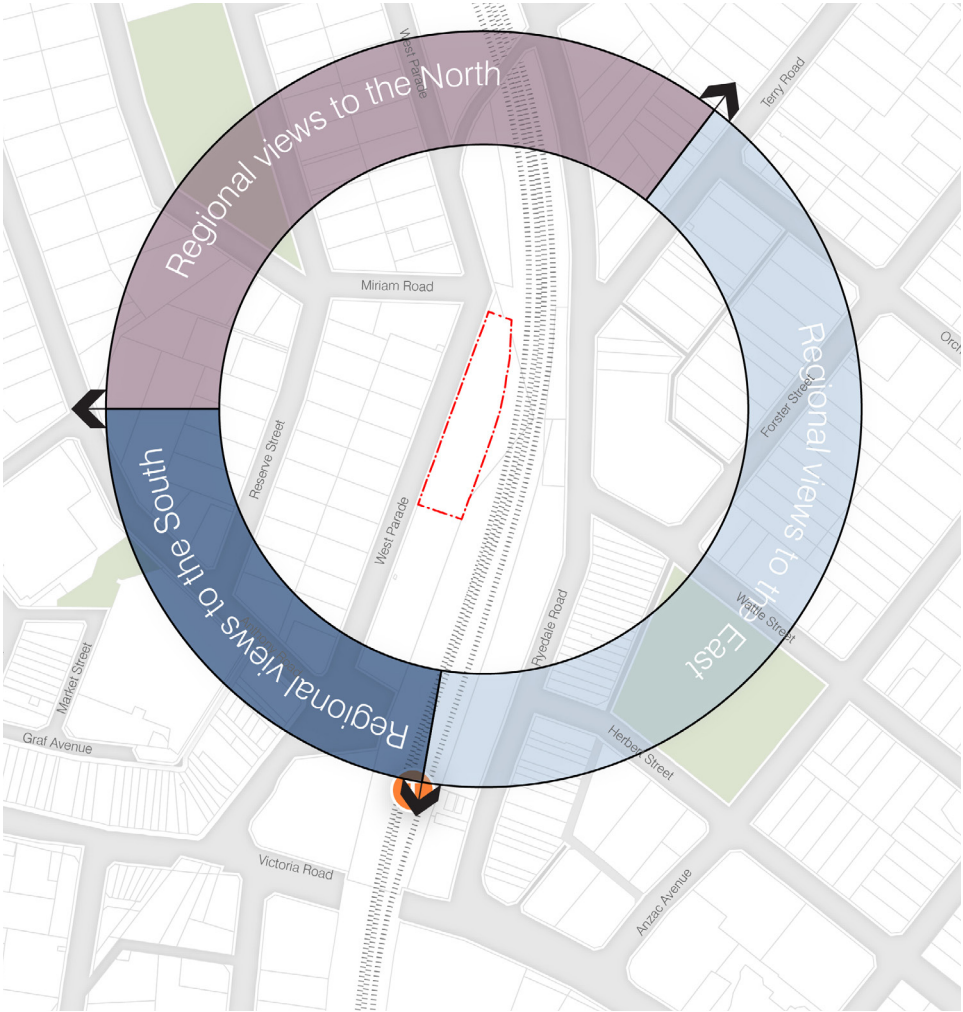
Existing Character

The site is surrounded by medium and high density residential development, with lower density housing located to the north. To the south of the site is the West Ryde Town Centre, which includes mixed use development, community facilities, including the West Ryde Library and community centre, and local shops.



Open Space

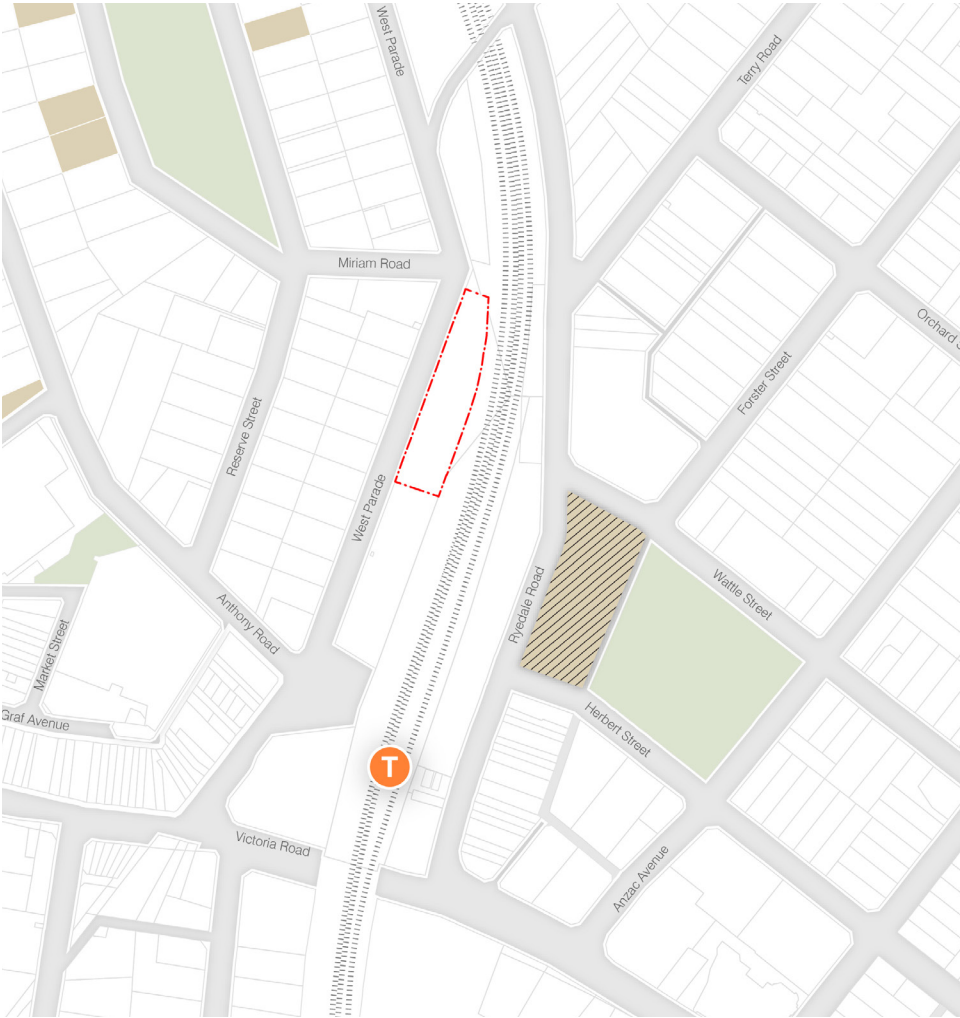
The subject site is located within close proximity to Miriam Park, a neighbourhood park to the north, a public plaza to the south on Anthony Road, and Anzac Park, a large local park is located on the eastern side of the rail corridor.



- Legend
- Subject Site
 - Views North
 - Views South
 - Views East

Views

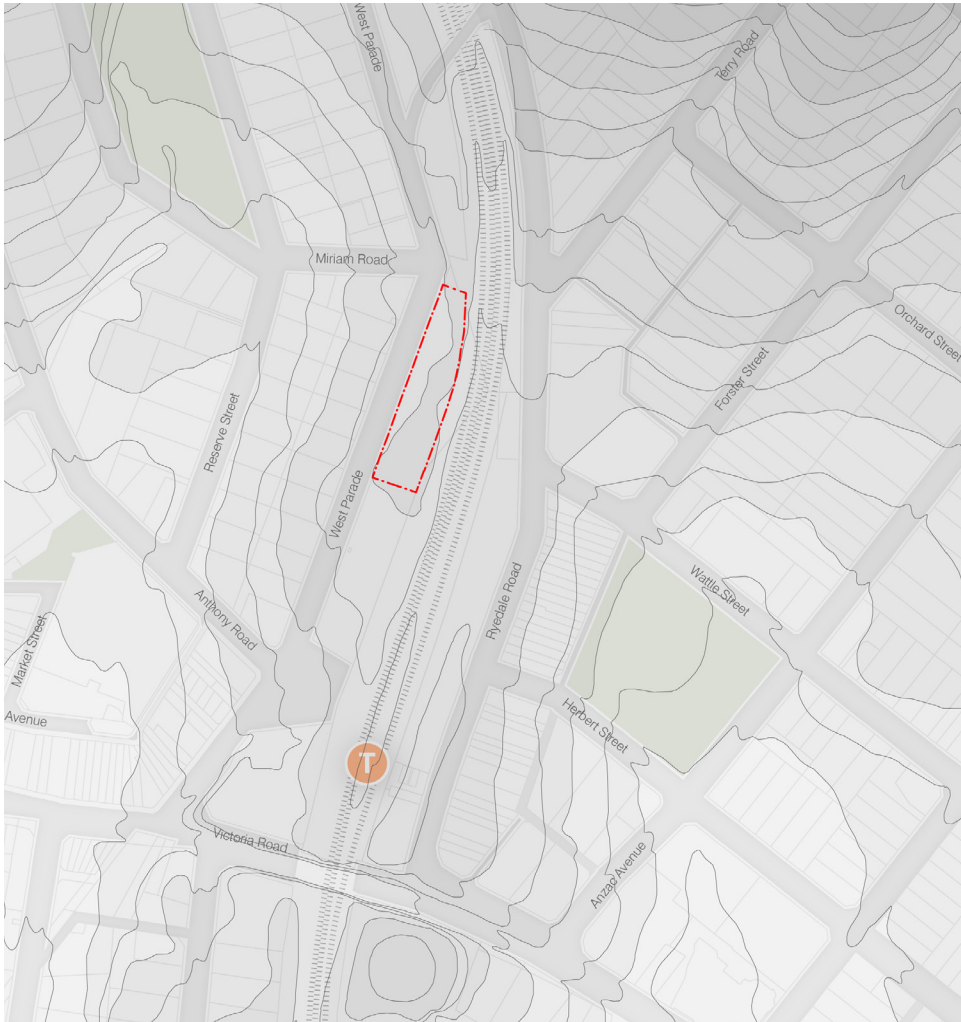
The subject site has potential to benefit from distant views to the south towards Parramatta River, as well as regional views to the Blue Mountains in the west.



- Legend
- Subject Site
 - Heritage Item

Heritage

The site does not contain any heritage items and is not within a conservation area. However, a local heritage item an conservation area is located to the south east of the site. Future development will need to consider any potential impacts, including overshadowing.

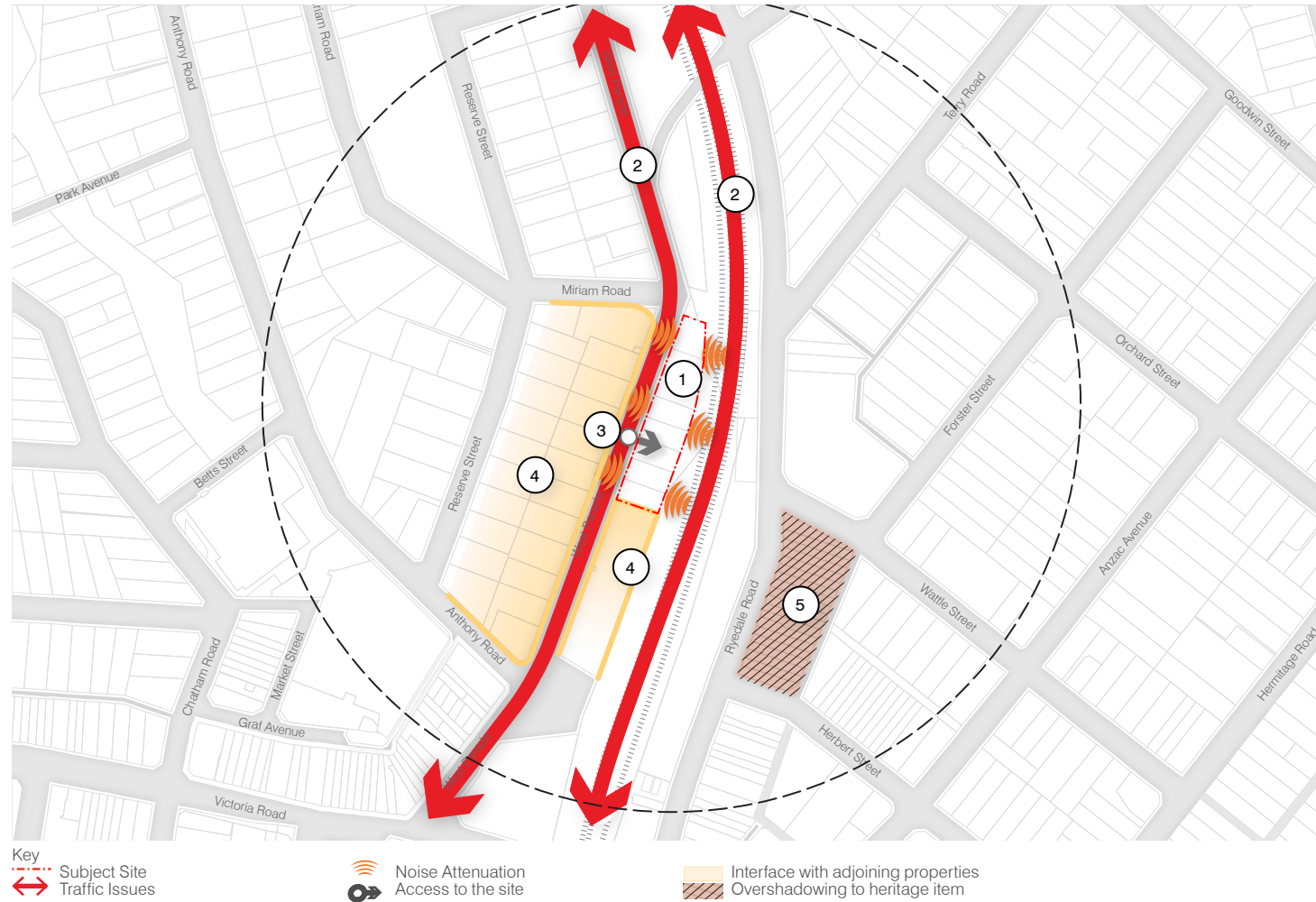


- Legend
- Subject Site
 - 2m Contour

Topography

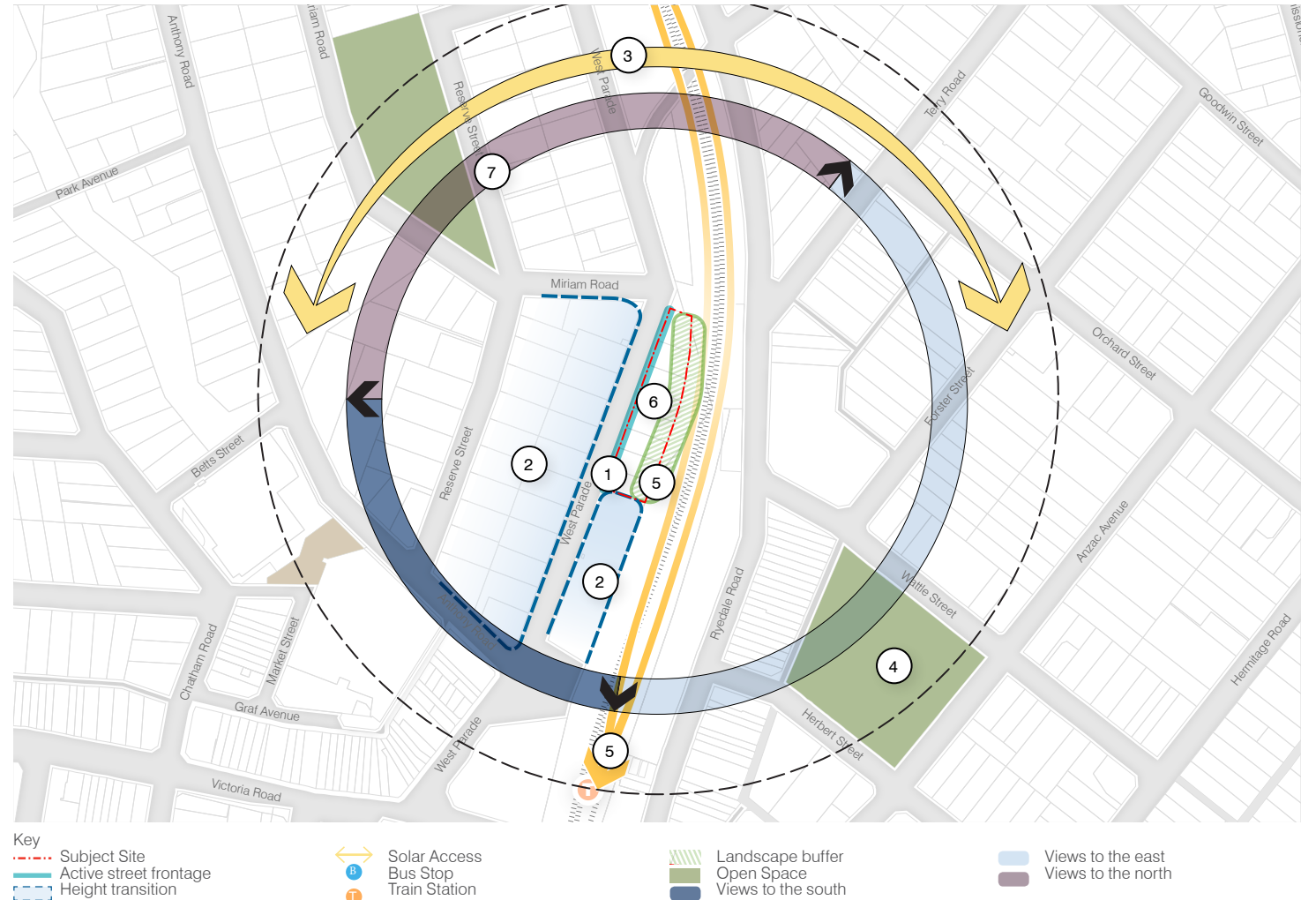
The subject site is relatively flat, with a slight slope falling to the south of the site. It lies on a small ridge between two broad valleys, with hilly slopes rising to the north.

Key findings



Constraints

- Noise:** Rail and traffic noise associated with the rail corridor to the east, and West Parade to the west.
- Interface:** Bound by a busy road to the west, and rail corridor to the east the interface along these boundaries will need to consider a noise and landscaped buffer.
- Access:** Vehicular access to the site is from West Parade and is limited to one vehicular entry point.
- Transition:** The site is located between high density town centre development and low density residential development. There will need to be a transition across the site, giving consideration to the amenity of neighbouring residential properties. Potential issues include overshadowing to the properties to the west.
- Heritage:** Future development will need to consider potential overshadowing to the conservation area to the south east.



Opportunities

- Street Frontage:** Maximise active frontages and residential entries addressing West Parade and creating a high quality residential streetscape, consistent with the existing local character along West Parade.
- Transition:** Opportunity for height transition across the site which responds to the established heights and densities within the area, and provides a transition between the low density residential to the north and the town centre to the south.
- Amenity:** north-south orientation ensures buildings can be oriented to maximise solar access.
- Landscape:** Incorporate landscape as a buffer between the site, the street and rail corridor in order to maintain the leafy character of the suburb.
- Public Transport:** Close proximity to public transport and town centre, all within a 200m catchment from the site.
- Overshadowing:** no existing buildings overshadow the site.
- Views & Vistas:** potential regional views to the west, south and east.

Recent development

The West Ryde Town Centre is located on the southern edge of the subject site. Surrounding development consists of residential development, including 9 storey residential flat buildings, 8 storey mixed use developments, retail strip shops and medium density walk up apartments

In January 2017, a planning proposal was submitted for Gateway Approval, at 2-6 Chatham Road on the western side of the railway line. The planing proposal is for 7-storey shop housing, with a proposed height increase from 15.5m to 24.0m, and an FSR increase from 1.25:1 to 3:1.

A recently completed mixed use development is located at 15-19 Chatham Road, which includes a Coles supermarket, 229 residential apartments and a public plaza.

On the eastern site of the railway line, immediately adjacent to the station Ryedale Road, a mixed use development was approved in January 2008 by the Department of Planning and Environment. The proposal included 4 buildings ranging from 7 to 12 storeys, consisting of 195 residential apartments, 2,200 square metres of retail GFA, 1,615 square metres of commercial GFA and a 390 square metres for a childcare facility. The development was not constructed and consent lapsed in January 2013. Nevertheless, it is expected the site will be developed at a similar scale to the previous approval in the future due the site's strategic location within West Ryde.

A recent development application was approved by the Land and Environment Court in July 2016 at 17-19 Ryedale Road, West Ryde. The proposal is for an 8 storey mixed use development with ground floor commercial and a 40 room boarding house. As of November 2017, construction has yet to commence.

Recent development in the West Ryde town centre demonstrates a trend for increased density in the area, taking advantage of the excellent public transport accessibility and established retail and community services established within the West Ryde Town Centre.



Legend

- Subject Site
- West Ryde Local Centre
- Station Walking Catchment
- Recent Development

Recent Development

- 2-6 Chatham Road (Planning Proposal)**
7 storey shop top housing
Ground floor retail
24m building height, 3:1 FSR
- 15-19 Chatham Road (Completed)**
8 storey shop top housing
Ground floor supermarket
229 dwellings
- 2 Rydedale Road (Approved/Lapsed)**
7-12 storey mixed use
3,815 sqm retail/commercial
195 dwellings
- 17-19 Ryedale Road (Approved)**
8 storey mixed use
Ground floor commercial
40 room boarding house

Chapter 2

Planning context

Strategic planning context

NSW State Priorities

The NSW Government has 18 state priorities, relating to growing the budget and economy, building infrastructure, protecting the vulnerable, improved services and safer communities. Key priorities relevant to the site include:

- Building Infrastructure – Increase Housing Supply Across NSW:
A key priority is to deliver more than 50,000 approvals every year to improve housing supply and put downward pressure on prices. The proposal will help achieve this aim by increasing housing supply and creating more diverse housing options.
- Protecting the Vulnerable – Creating Sustainable Social Housing:
The NSW Government recognises the need to address the growing demand for social housing as it provides a sustainable safety net to the most vulnerable. The proposal will increase social and will support this goal.

Future Directions for Social Housing in NSW

Throughout NSW, and particularly Sydney, demand for social housing is increasing, with a waiting list which has now reached 60,000 households. The site offers an excellent opportunity to provide new social housing in a highly accessible location.

The NSW Government's *'Future Directions for Social Housing in NSW'* sets out the vision for social housing over the next 10 years and establishes strategic priorities, including:

- Deliver more housing and a better social housing experience, with better quality social housing and improved social outcomes.
- Develop new mixed communities where social housing blends in with private and affordable housing, with better access to transport and employment, improved community facilities and open spaces.
- Partner with the private and not for profit sectors to fast track the redevelopment of sites in metropolitan Sydney and regional NSW

Supporting these objectives, *Action 1.1 in Future Directions*, is to 'Increase redevelopment of Land and Housing Corporation properties to renew and grow supply'. This provides a clear directive and strategic justification for the NSW Government to redevelop land to deliver increased social housing.

A Plan for Growing Sydney

A Plan for Growing Sydney, released in 2014 by the NSW Government, establishes a framework for Sydney's growth over the next 20 years.

The Plan's focus is on providing more housing, with a greater choice of dwelling types in well-served locations. A key aim is to accelerate housing supply and new housing in centres which have public transport that runs frequently and can carry large numbers of passengers.

The subject site, being within 200m of the West Ryde Railway Station, is an excellent location for increased housing and is consistent with the aims in *A Plan for Growing Sydney*.

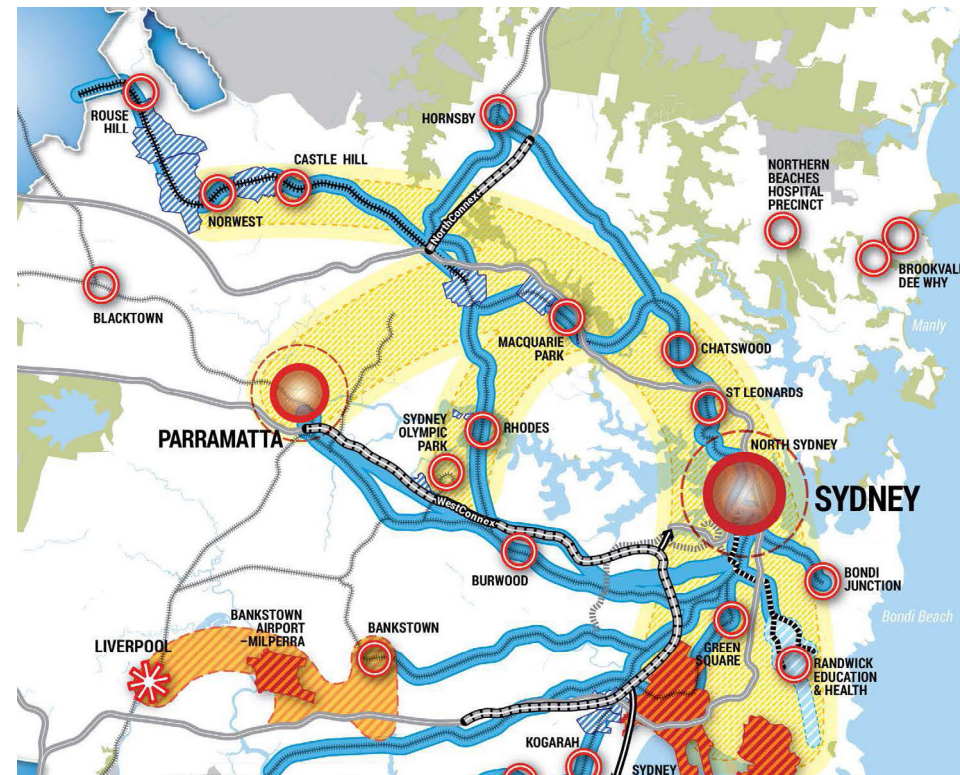


Image: A Plan for Growing Sydney (Source: Department of Planning and Environment, 2017)

Draft Towards our Greater Sydney 2056

The Greater Sydney Commission released the draft *Towards our Greater Sydney 2056*, in November 2016. The document outlined draft amendments to *A Plan for Growing Sydney* to align with the three cities vision established in the draft District Plans. This document has now been superseded by the draft *Greater Sydney Region Plan 2056*, released by the Greater Sydney Commission in October 2017.



Image: Draft Greater Region Plan (Source: Greater Sydney Commission, 2017)

Draft Greater Sydney Region Plan 2056

The Greater Sydney Commission released the draft *Greater Sydney Region Plan 2056* 'A metropolis of three cities – connecting people', on 22 October 2017. The draft Plan is a broad vision for the next 40 years, based on a global metropolis of three-cities: an Eastern Harbour City, a Central River City and a Western Sydney Aerotropolis.

The overarching aim of the draft Plan is a 30-minute city, where most people can travel to their nearest metropolitan city centre or strategic centre by public transport within 30 minutes. The site is a 5-10 minute walk to the train station and the West Ryde Town Centre, and provides access to the strategic centres Rhodes and Macquarie Park in less than 30 minutes.

A key objective of the draft Plan is to increase the supply of housing, particularly with more diverse and affordable options. Renewing and increasing social housing is of critical importance, that will provide a diversity of housing outcomes across in Greater Sydney.

The Draft Plan recognises the role of NSW LAHC, in delivering increased social housing. The subject site, being located adjacent to the West Ryde Town Centre, is supported by excellent transport, open space, employment, and community uses and provides an opportunity to deliver new social housing.

NSW Long Term Transport Master Plan 2012

The NSW *Long Term Transport Master Plan* identifies strategies and actions for integrated transport across the State to 2031. A key objective of the Plan is to encourage medium and high-density housing within the walking catchments of centres well serviced by public transport and infrastructure. The draft *Future Transport Strategy 2056*, released in October 2017, provides an update to the Plan.

Draft Future Transport Strategy 2056

The draft *Future Transport Strategy* is an update of the *NSW Long Term Transport Master Plan 2012*. It is a 40-year vision and strategy for Greater Sydney, supported by the draft *Greater Sydney Region Plan 2056*.

West Ryde is strategically located on the existing rail network, with excellent connections to the strategic centres of Rhodes and Macquarie Park – both accessible by public transport within 30 minutes. Access to Macquarie Park and other key employment centres will also be enhanced following commencement of the Sydney Metro North West.

In the shorter term (0-10 years) the Strategy identifies public transport improvements along Victoria Road as well as the T1 line to improve capacity and reliability on existing transport corridors. The Strategy also includes longer term initiatives for a higher capacity mass transit link to expand 30-minute access between Parramatta and Epping. This would provide improved connections between West Ryde and Parramatta in the future.

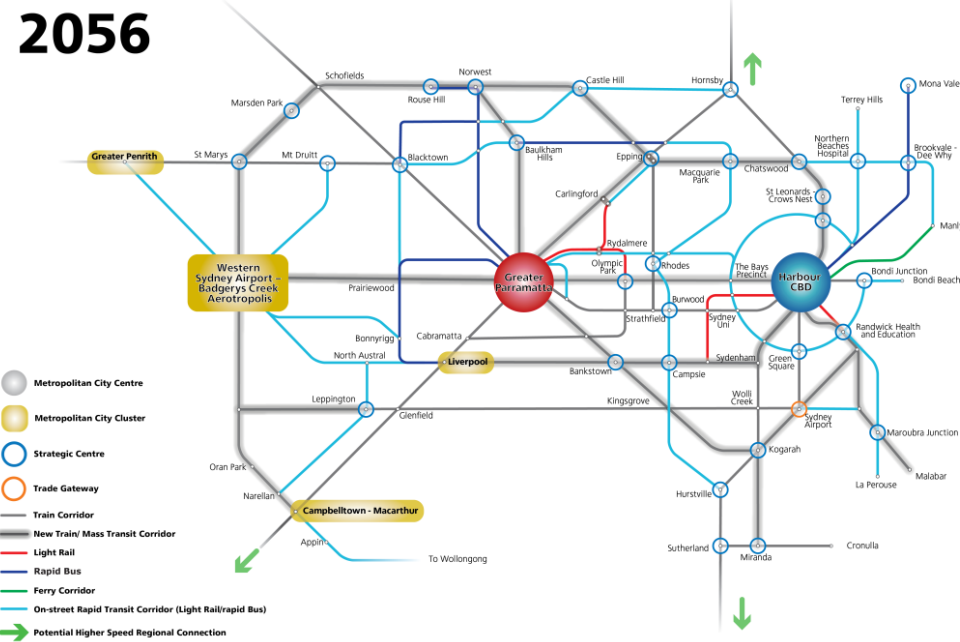


Image: Greater Sydney Intermediate Transit Network 2056 - Visionary (Source: Transport for NSW, 2017)

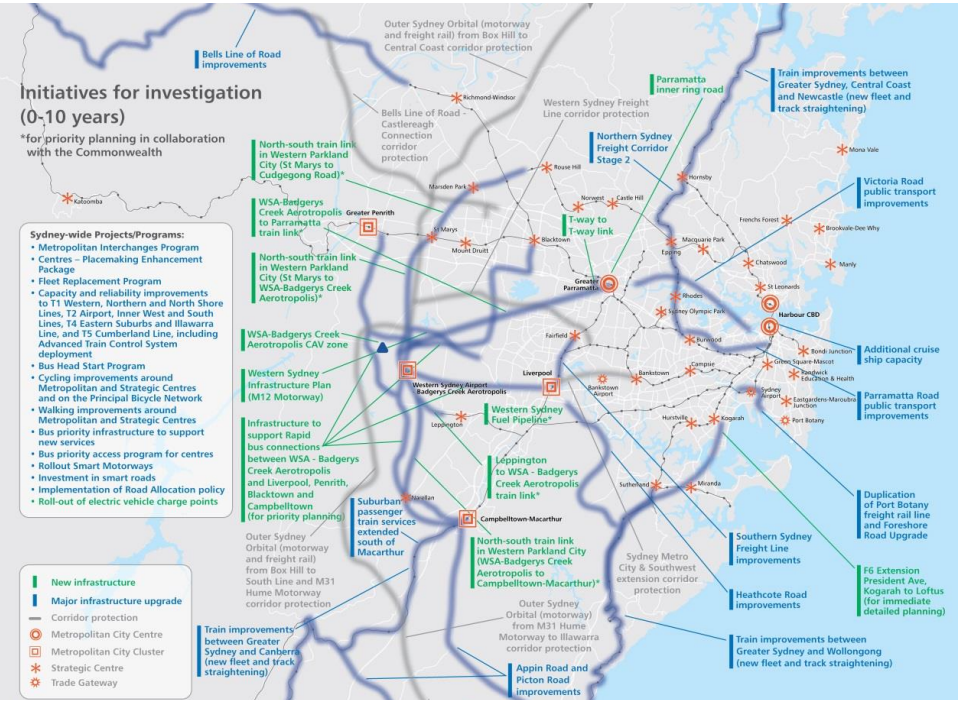


Image: Transport initiatives for investigation 0-10 years (Source: Transport for NSW, 2017)

Draft Greater Sydney Services & Infrastructure Plan

The draft *Greater Sydney Services and Infrastructure Plan* is a supporting plan of the draft *Future Transport Strategy 2056*, and details a vision for how transport can support growth and the economy of Greater Sydney and NSW. The Plan outlines future transport and corridor investigations over the next 40 years and identifies the investigation of public transport improvements along Victoria Road within the 0-10 year timeframe. The mid-term strategy to deliver public transport improvements along Victoria Road enhances the accessibility and amenity of West Ryde by adding an upgraded mode of transport with facilities for interchange.

Revised Draft North District Plan

The revised draft *North District Plan*, released by the Greater Sydney Commission in October 2017, sets out planning priorities and actions for the North District.

The draft Plan identifies West Ryde as a local centre. Local centres are highly accessible, provide important links to strategic centres, and will be increasingly supported by residential development. A key objective is to increase residential development in, or within walking distance of local centres..

Over the next 20 years, the population of the North District is expected to grow by an additional 196,000 people, generating demand for an additional 92,000 homes. The greatest increase in population is expected in Ryde Local Government Area, with an additional 51,700 people.

The 5-year housing target for Ryde LGA is an additional 7,600 new homes. To achieve this there will be a need for more housing in locations well supported by existing or planned public transport, such as West Ryde.

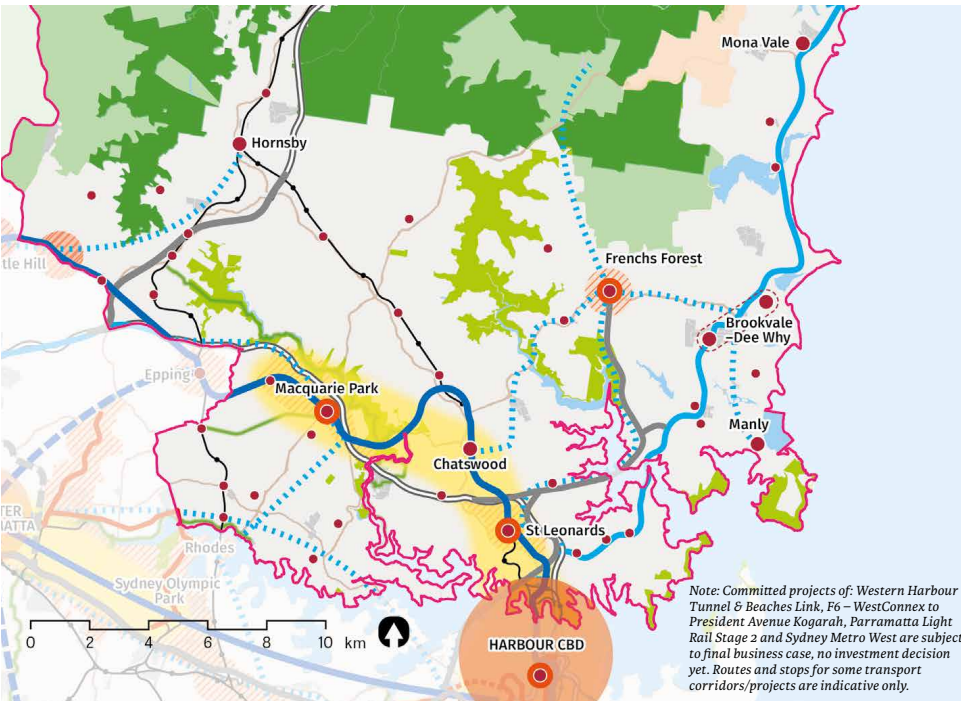


Image: Draft North District Structure Plan (Source: Greater Sydney Commission, 2017)

Sydney Future Strategies

The five *Sydney Future Strategies* are all directed by the *NSW Long Term Transport Master Plan 2012*, which has since been revised through the recently released draft *Future Transport Strategy 2056*, as discussed above. Nevertheless, the relevant components of each strategy are outlined as follows:

Sydney’s Light Rail Future 2012

Sydney’s Light Rail Future 2012 is a strategic plan developed by the NSW Government to address the increasing congestion on Sydney’s roads, particularly within the CBD, and along the Harbour Bridge and George Street. The strategy outlines the NSW Government’s approach in delivering the CBD and South East Light Rail as well as the extension of the Inner West Light Rail, while also considering investigations of light rail along key corridors including Victoria Road. As the site is located approximately 400m from Victoria Road, any future public transport capacity delivered through light rail along this corridor will enhance accessibility for residents living at the subject site.

These corridors have been considered in the draft *Future Transport Strategy 2056*, as previously discussed, which outlines committed public transport infrastructure projects and corridors under investigation. Under the draft Strategy, the corridor has been identified as an initiative of investigation for public transport improvements within the draft *Greater Sydney Services and Infrastructure Plan*. The mode of transport (bus or light rail) has not been specified at this stage.

Sydney’s Rail Future 2012

Sydney’s Rail Future 2012 outlines a long term plan to increase the capacity of Sydney’s rail network by modernising current services, upgrading existing infrastructure and investing in rapid transit to meet the needs of the city’s growing population. The strategy prioritises the North West Rail Link (now North West Metro), connecting services under Sydney Harbour and through to Bankstown (now City & South West Metro).

With an 8 minute travel time between West Ryde and Epping Railway Stations, the North West Metro will improve capacity and customer experience for residents accessing jobs and education in Macquarie Park and beyond when completed in 2019.



Image: Sydney’s Rail Future - A Three Tier Railway (Source: Transport for NSW, 2012)

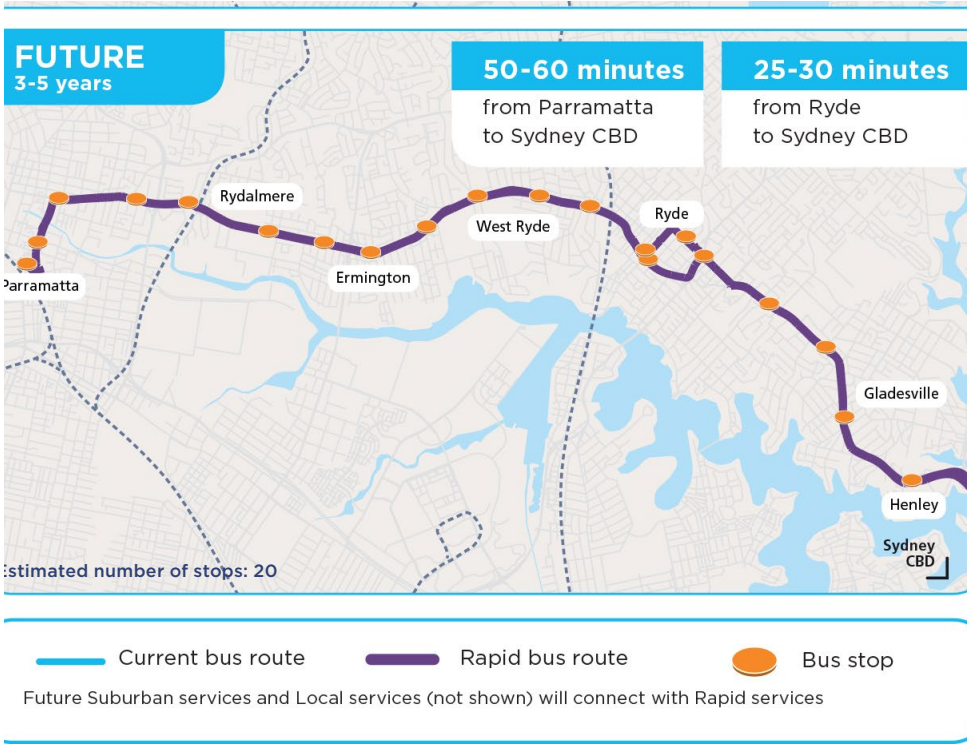


Image: Future rapid bus route: Parramatta - CBD via Ryde (Source: Transport for NSW, 2013)

Sydney’s Bus Future 2013

Sydney’s Bus Future 2013 outlines the NSW Government’s long term plan to redesign Sydney’s bus network. The strategy sets out actions to deliver fast and reliable bus services, particularly ‘turn-up-and-go’ bus services along key corridors, including Victoria Road as a rapid bus route. The strategy identifies West Ryde as a potential stop to interchange with existing heavy rail and service the existing mixed-use centre. Any future public transport capacity delivered through rapid bus along the Victoria Road corridor will enhance accessibility to the site.

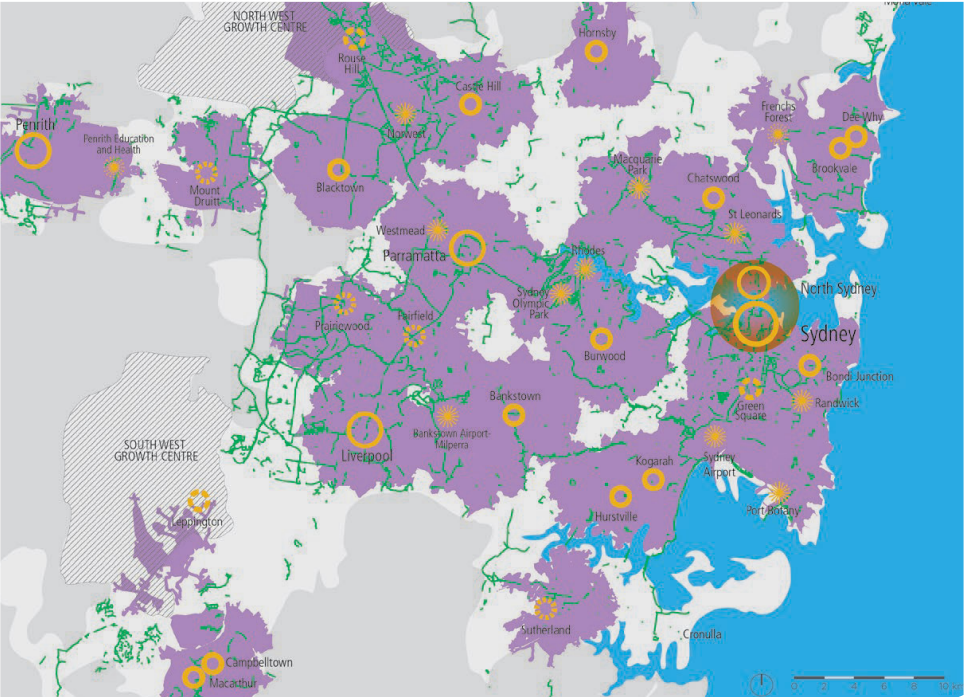


Image: 5km cycling catchment from major centres and exiting cycleways (Source: Transport for NSW, 2013)

Sydney’s Cycling Future 2013

Sydney’s Cycling Future 2013 outlines the NSW Government’s strategy on improving the cycling network across Sydney.

Integrated bicycle storage facilities at West Ryde Railway Station have been delivered in recent years to allow cyclists to ride to the transport interchange and safely store their bike. Residents in West Ryde will also have the ability to cycle south to the strategic centre of Rhodes with a planned dedicated cycle route adjacent to the railway line being investigated between West Ryde and Meadowbank.

Sydney’s Walking Future 2013

Sydney’s Walking Future 2013 outlines the NSW Government’s strategy on improving walkability within a two kilometre catchment of cities, towns, local centres and public transport hubs. West Ryde has not been identified within the strategy as a catchment, however, the subject site is easily walkable from the railway station and Town Centre on the dedicated sidewalks along West Parade, and is consistent with the aims of the Strategy.

Development by Rail & Road Corridors Guidelines

The Development near Rail Corridors & Busy Roads – Interim Guideline 2008 was developed by the then NSW Department of Planning to assist in reducing the health impacts of rail and road noise and adverse air quality on sensitive adjacent development. The Guidelines are to be applied pursuant to State Environmental Planning Policy (Infrastructure) 2007, to ensure that development adjacent to major road and rail corridors achieves appropriate acoustic amenity by meeting the internal noise criteria specified in the SEPP.

Clause 87 of the SEPP triggers the application of the guidelines. These guidelines have been considered in the ‘Traffic and Railway Noise and Vibration Assessment’ prepared by Acoustic Logic Consultancy in 2009 for the approved Concept Plan (MP09_0029). Future development will address Clause 87, and will incorporate the recommendations from the report, which include upgraded glazing and building structure vibration isolation to comply with noise and vibration objectives.

Better Practice Guide for Waste Management

The Better Practice Guide for Waste Management in Multi-unit Dwellings is a guideline developed by the Department of Environment and Climate Change to incorporate better waste management practices in multi-dwelling developments. The guidelines outline various essential issues that are to be considered when designing a waste management system for high density residential flat buildings.

Future detail development will need to consider the objectives in Chapter 6 (High Rise Residential Blocks More Than Seven Storeys). Future development applications will incorporate the recommended waste systems and spatial layout considerations for service access.

NSW Water Quality Objectives

Developed by the Department of Environment and Conservation NSW, the NSW Water Quality Objectives aim to improve the health of waterways. Development should take into account the principles outlined in the NSW Water Quality Objectives.

Future development will be consistent objectives, including stormwater management and water sensitive urban design. These have been assessed within the ‘Stormwater and Groundwater Assessment’ prepared by BMD Consulting Consultancy in 2009 for the approved Part 3A Application (MP09_0029). Water management will also be considered in the detailed design phase and incorporated into subsequent project specific applications.

Statutory planning context

SEPP (State & Regional Development) 2011

Development that is State Significant Development is identified in *State Environmental Planning Policy (State and Regional Development) 2011*.

Schedule 2 of the SEPP lists sites which have been identified as State Significant Development. This includes development on a NSW Land and Housing Corporation site when the site is identified on the *State Significant Development Sites Map*, and the development is carried out by or on behalf of the NSW Land and Housing Corporation, with a capital investment value of more than \$20 million.

Although the site is owned by NSW Land and Housing Corporation, the site is not identified on the *State Significant Development Sites Map* under the SEPP. This means assessment under Division 4.1 of the *Environmental Planning and Assessment Act 1979* will not apply to the modification.

SEPP (Infrastructure) 2007

State Environmental Planning Policy (Infrastructure) 2007 aims to facilitate the effective delivery of infrastructure across NSW and identify matters that should be considered in relation to development adjacent to transportation corridors.

One of the primary aims outlined in Clause 2 of the SEPP is to allow for the efficient development, redevelopment or disposal of surplus government owned land. The proposed modification meets the aims of the SEPP as it allows for development on land owned by NSW Land and Housing Corporation while maximising the development potential for a site located in close proximity to a railway station.

The site's location adjacent to the Northern Rail Corridor requires consideration under Part 3, Division 15, Subdivision 2 of the SEPP. In particular, Clause 87 requires consideration of the impact of rail noise or vibration on non-rail development. A 'Traffic and Railway Noise and Vibration Assessment' was prepared by Acoustic Logic Consultancy in 2009 for the approved Part 3A Application (MP09_0029), and assessed the requirements and standards set out in the *Development near Rail Corridors & Busy Roads – Interim Guideline 2008*. Future development can comply with these requirements and will need to apply the recommendations from the report, which include upgraded glazing and building structure vibration isolation to comply with noise and vibration objectives.

SEPP (Building Sustainability Index: BASIX) 2004

State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004 aims to minimise demand for energy and potable water supply in residential developments. The provisions of BASIX will apply to future detailed development applications for the residential development on the site, which will need to demonstrate how the requirements of BASIX will be achieved.

SEPP 55 - Remediation of Land 2007

State Environmental Planning Policy No. 55 requires an assessment of whether a site is contaminated prior to the carrying out of development on land. Clause 7 outlines the requirements in determining the level of site contamination and suitable remediation.

The proposal does not include a change of use and there is no evidence of hazardous uses or fill on the site.

A brief for a Preliminary Environmental Site Assessment (PESA) and a Hazardous Materials Assessment (HAZMAT) was prepared by S&N Environmental Engineers & Contractors in 2009 for the approved Part 3A Application (MP09_0029). The Statement of Commitments includes a commitment to undertake the PESA and HAZMAT, and for further studies and remediation works if necessary to accord with acceptable industry standards and practices.

SEPP 65 - Design Quality of Residential Apartments

State Environmental Planning Policy 65 – Design Quality of Residential Flat Apartment Development (SEPP 65) aims to improve the design quality of residential apartment development in NSW. The policy aims to deliver a better living environment for apartment residents, enhance streetscapes and neighbourhoods in NSW.

SEPP 65 identifies ten design principles that provide a consistent approach to the design and assessment of apartments across the State. *SEPP 65* also gives effect to the *Apartment Design Guide (ADG)*, which details how residential apartment development can meet the design quality principles.

The original Concept Plan Approval was issued in 2010, prior to the introduction of the ADG. The proposed modification has been developed and tested to ensure consistency with the SEPP 65 and the ADG. A detailed assessment of the proposed modification is provided in Chapter 6 Assessment. Modifying the approval to be consistent with the ADG will ensure future development can comply with the requirements in the ADG, and will result in greater residential amenity, and improved design outcomes for the site.

SEPP (Affordable Rental Housing) 2009

State Environmental Planning Policy (Affordable Rental Housing) 2009 aims to provide a mechanism for a more simple and efficient provision of affordable rental housing in NSW.

NSW Land and Housing Corporation is one of the main providers for affordable rental housing, and in conjunction with the private sector, will deliver a mix of private, social, and affordable housing on the subject site.

Any future development applications proposing affordable housing may be subject to the relevant provisions of the *Affordable Rental Housing SEPP 2009*, contained in Division 1 In-fill affordable housing of Part 2 New affordable rental housing.

Ryde Local Environmental Plan 2014

The planning controls under the Ryde Local Environmental Plan (LEP) 2014 do not reflect the current approval on the site. However, the relevant planning controls from the Ryde LEP are summarised below.

R4 High Density Residential

The subject site is zoned R4 High Density Residential under the Ryde LEP 2014. The objectives of the zone are to provide for housing needs of the community, with a variety of housing types within a high density residential environment.

The Concept Plan approval is for a mixed-use development, including 619 square metres of commercial GFA and 71 square metres of retail GFA. As the current modification proposes to remove the approved commercial and retail uses, an increase in 690 square meters of residential GFA on the site is proposed. The removal of the commercial and retail floorspace,strengthens the consistency with the objectives of R4 zone. Furthermore, the proposal; includes a mix of market, social and affordable housing, increasing the variety of housing types within West Ryde.

Height & Floor Space Ratio

The site has a maximum height limit of 11.5m and an FSR of 1:1. The proposed modification will not exceed the approved height of 12 storeys, or increase the approved FSR of 3.5:1. The height and FSR is considered acceptable due to the site's strategic location within West Ryde. The site is approximately 200m north of the West Ryde Station, with convenient access to train, bus and taxi services, the density is considered appropriate.

The proposed development is suitable in the context of West Ryde as it will provide a transition between higher densities in the south and east, and lower densities in the north and west.

Land to the south of the site, including an existing 9 storey residential flat building, has a maximum height of 33.5m. The proposal development relates well with the existing 9 storey residential flat buildings at 57 West Parade. The proposal also provides a transition to the north to appropriately respond to the surrounding context and scale.

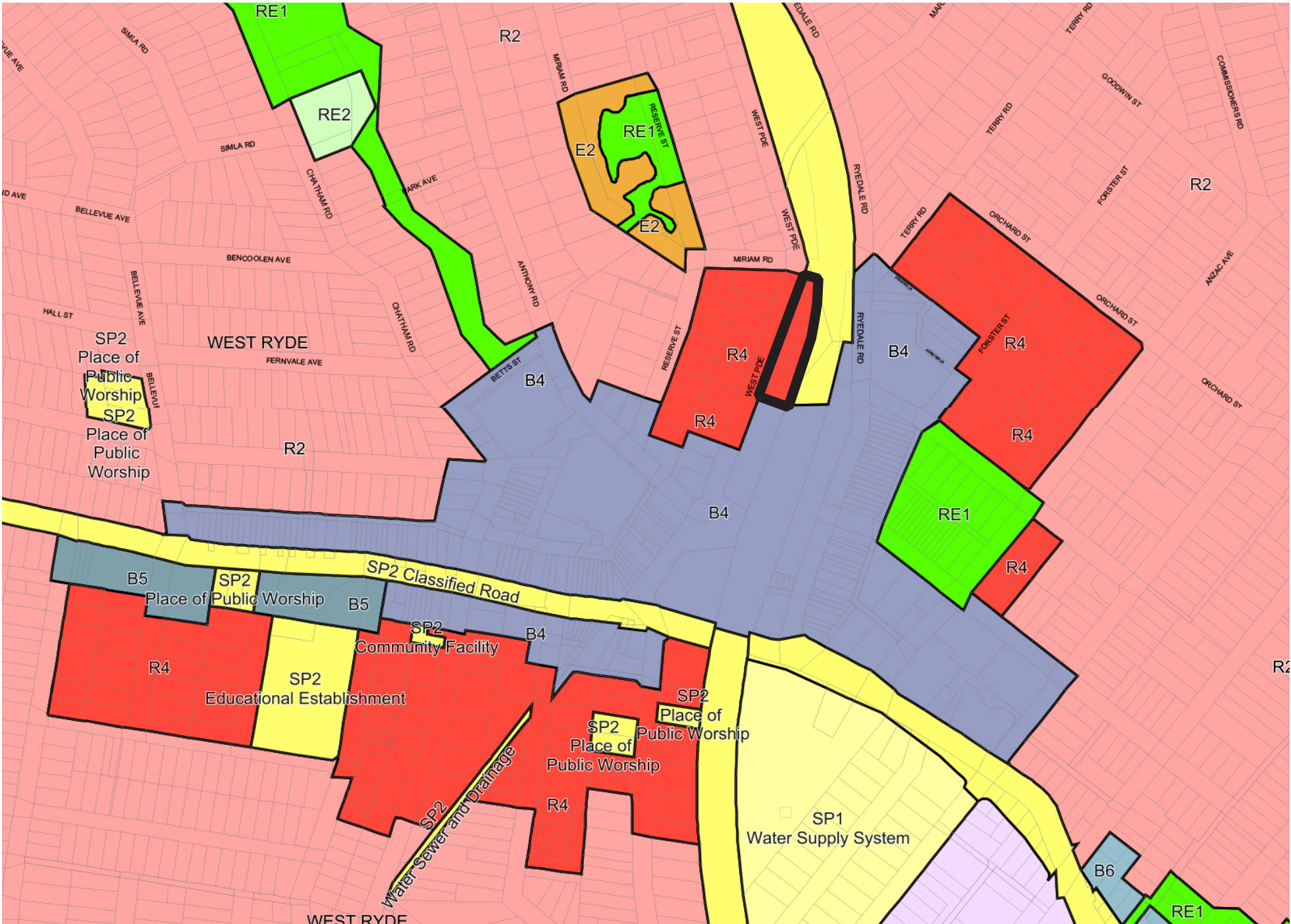


Image: Land use zone map (Source: Ryde Local Environmental Plan 2014, annotations by Architectus)

Concept plan approval

Part 3A Concept Approval

The site has an existing Concept Plan approval (MP09_0029) issued pursuant to the repealed Part 3A of the *Environmental Planning and Assessment Act 1979*. The Concept Plan approval is for a mixed use development, ranging in height from 5 to 12 storeys, with a total GFA of 13,149 square metres. The Concept Plan approval includes 619sqm of commercial floorspace and 71sqm of retail floorspace. The commercial floorspace was intended to be developed for Family and Community Services Office, however, an office in this location is no longer required.

A modification under Section 75W, was approved on 15 June 2015 to extend the consent until 15 June 2018.

| Current Approval | |
|----------------------|----------------------|
| Max Height (storeys) | 5 - 12 storeys |
| Max Height (m) | 38 m |
| FSR | 3.52:1 |
| GFA | 13,149 square metres |
| Residential GFA | 12,459 square metres |
| Commercial GFA | 619 square metres |
| Retail GFA | 71 square metres |
| Dwellings | 138 apartments |
| Parking | 105 spaces |

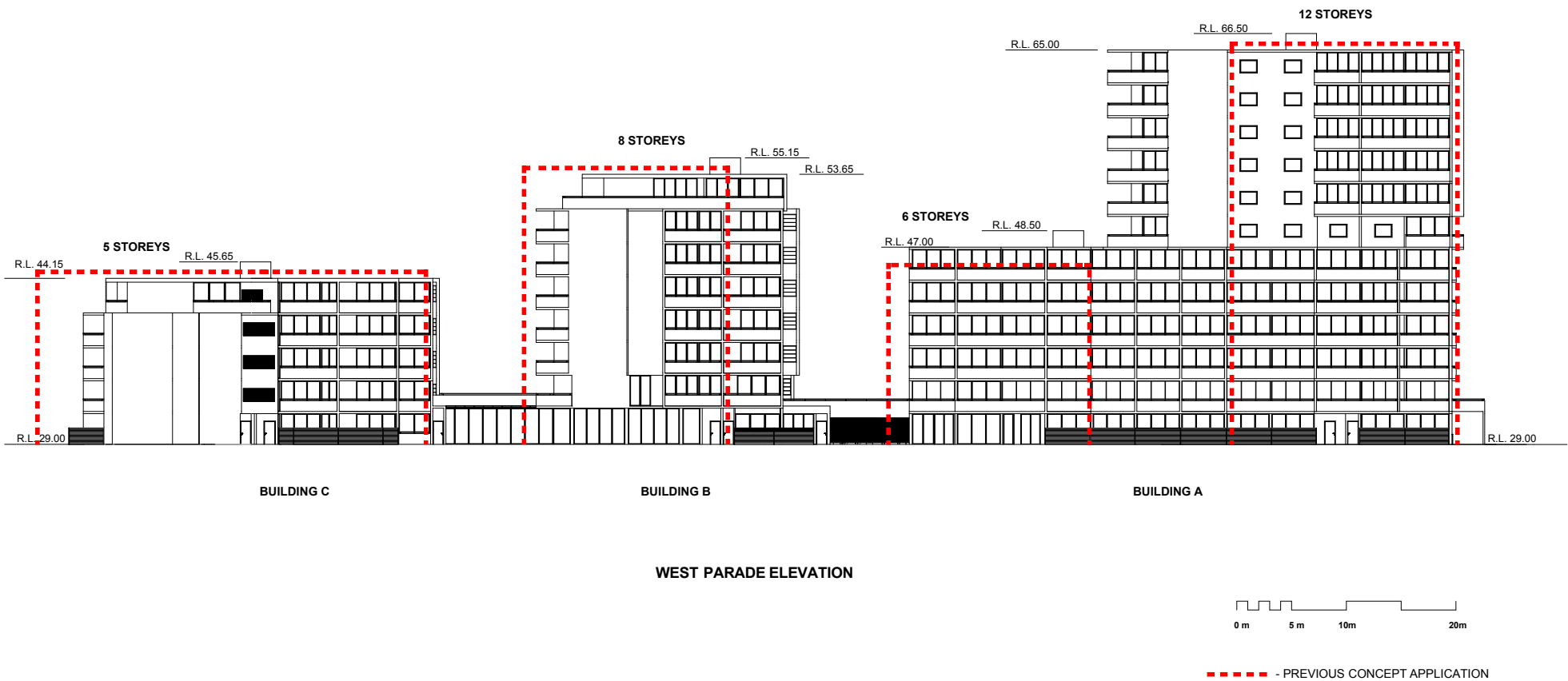


Image: Approved elevation (Source: Caldis Cook Group for NSW Land and Housing Corporation)

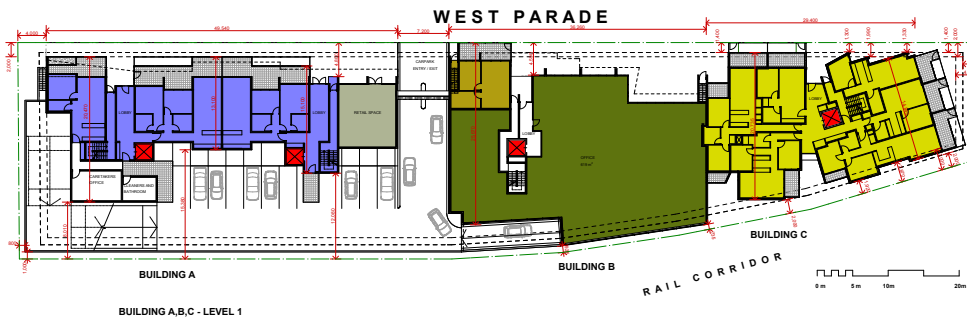


Image: Approved level one floor plan (Source: Caldis Cook Group for NSW Land and Housing Corporation)

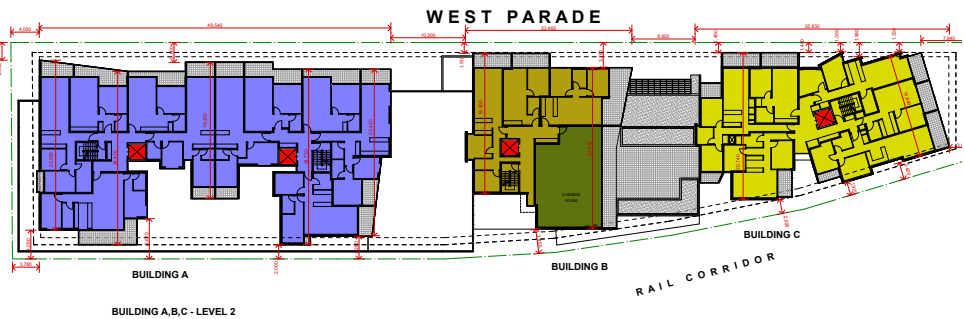


Image: Approved level two floor plan (Source: Caldis Cook Group for NSW Land and Housing Corporation)

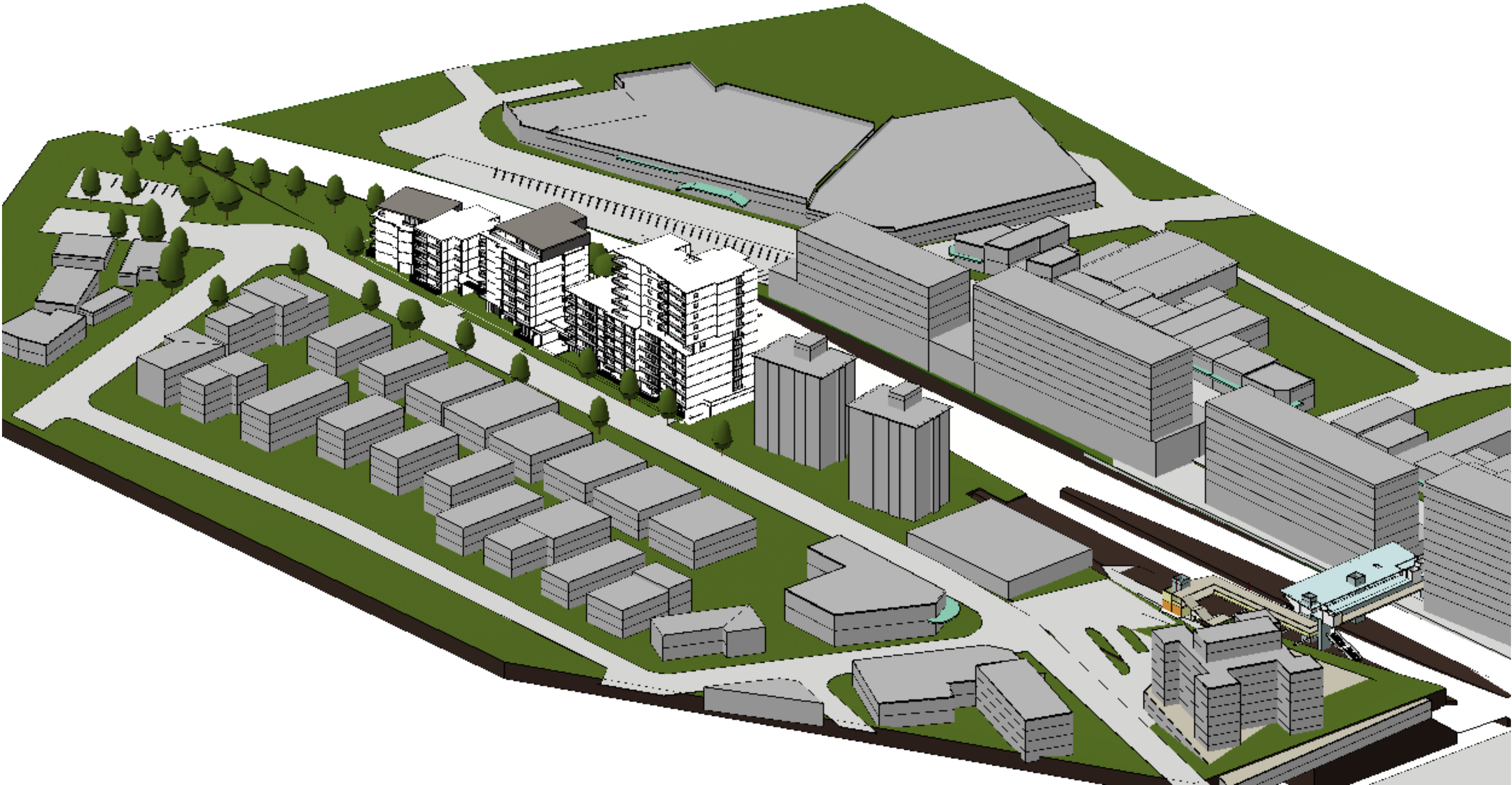


Image: 3D view looking north-east of Part 3A approval (Source: Caldis Cook Group for NSW Land and Housing Corporation)

Chapter 3

Design approach

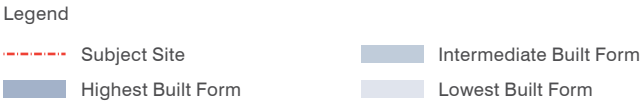
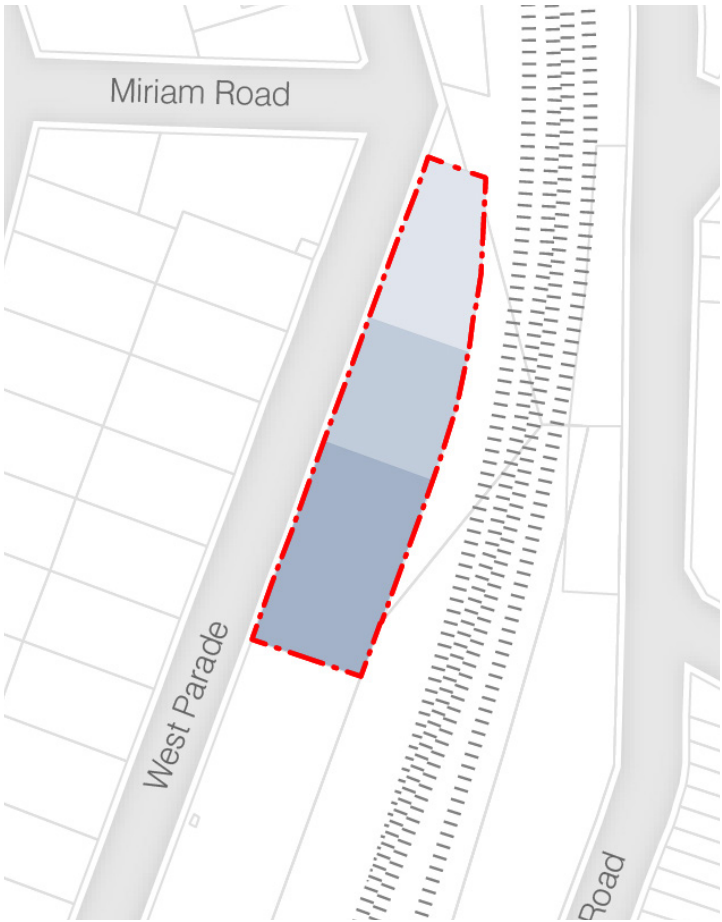
Design objectives

The following objectives have been developed to inform the design approach and proposed modification.

The design objectives cover site planning issues, and ensure a site-specific approach to height, massing, streetscape communal open space and setbacks.

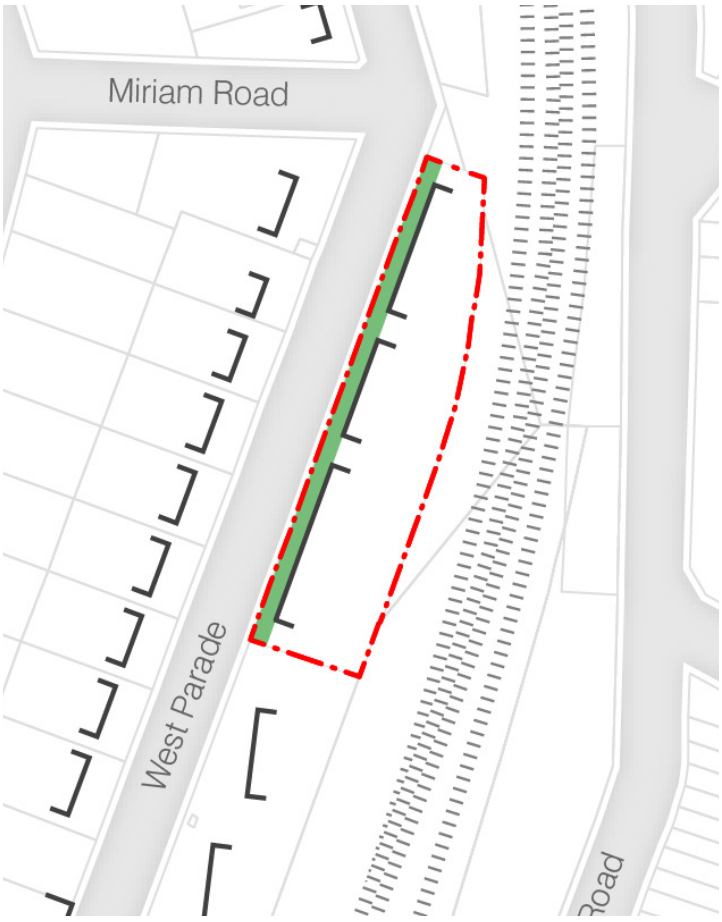
The design objectives are consistent with the ADG and it is intended that future development will be consistent with the site planning considerations and design objectives in this section.

The design objectives must be addressed in future project specific development applications for the site.



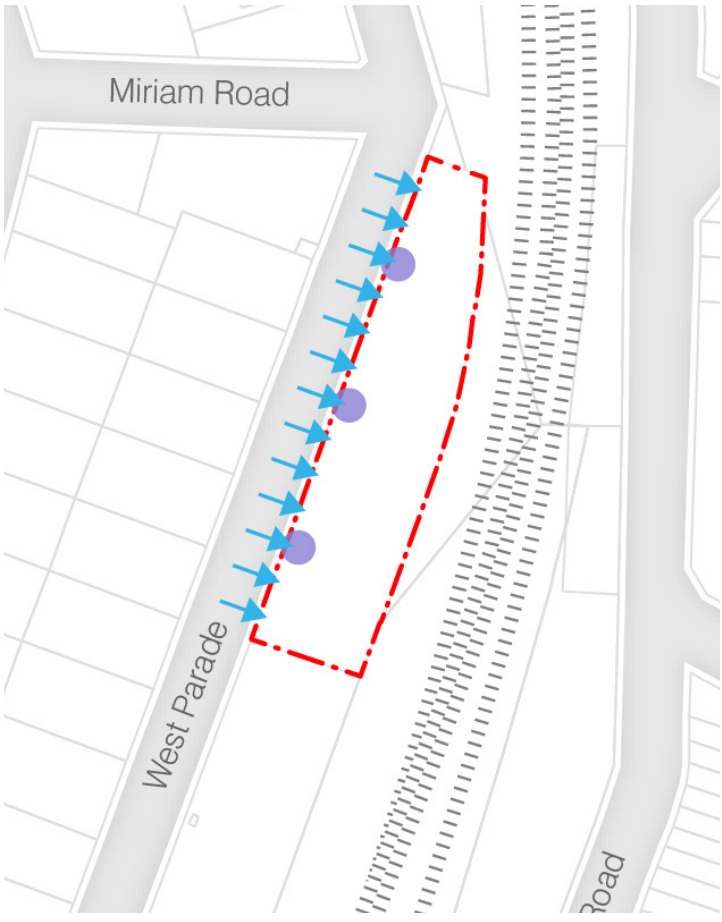
Provide a transition in height and density

- Provide a transition in building height across the site
- The scale of development is to be higher towards the south end of the site, closer to the train station.
- Building heights to be stepped down in the north of the site to create a transition to surrounding residential areas.



Address the public domain

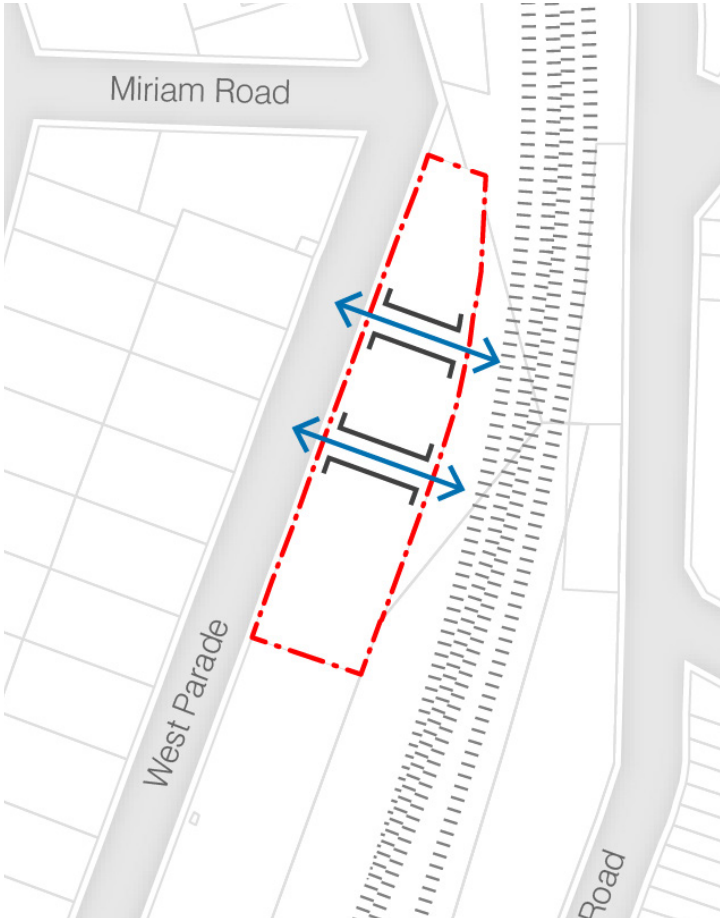
- Create a green, landscaped edge along West Parade
- Ensure a continued 'green' feel and garden character along West Parade is maintained.
- Ensure new built form addresses the public domain.
- Provide ground floor residential apartments with front gardens that address West Parade.



Maximise residential entries

- Provide a fine-grained and active street frontage with frequently-spaced residential entries to ground floor apartments and residential lobbies.
- Ground floor apartments should have direct access to the street.
- Provide ground floor maisonette apartments wherever possible to create a vibrant, safe and attractive residential street frontage.

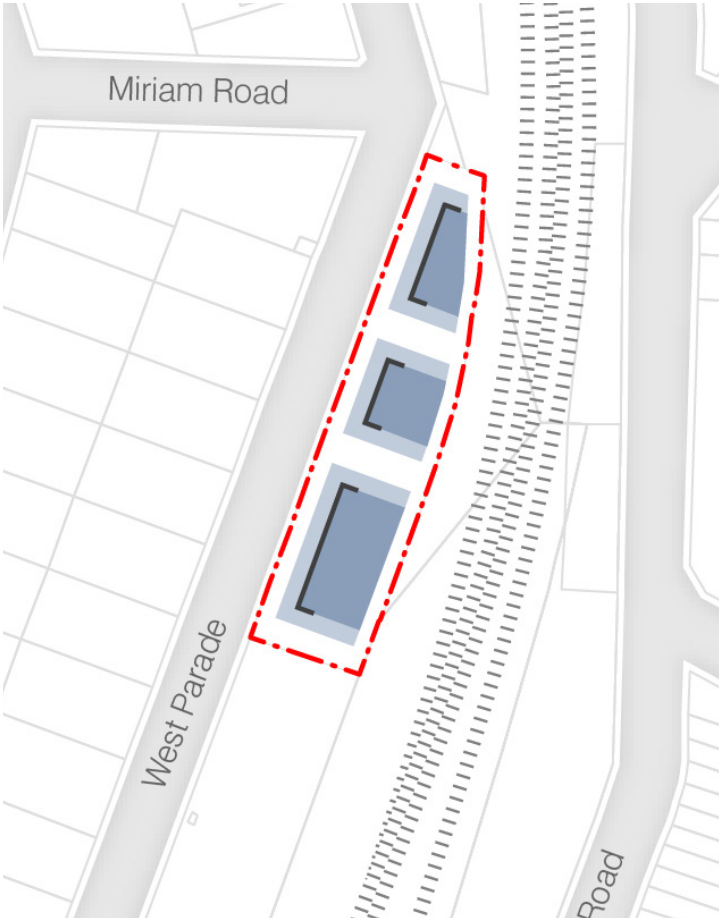




- Legend
- Subject Site
 - Thought-Site Vistas
 - Indicative Built Form Edges

Built Form Massing

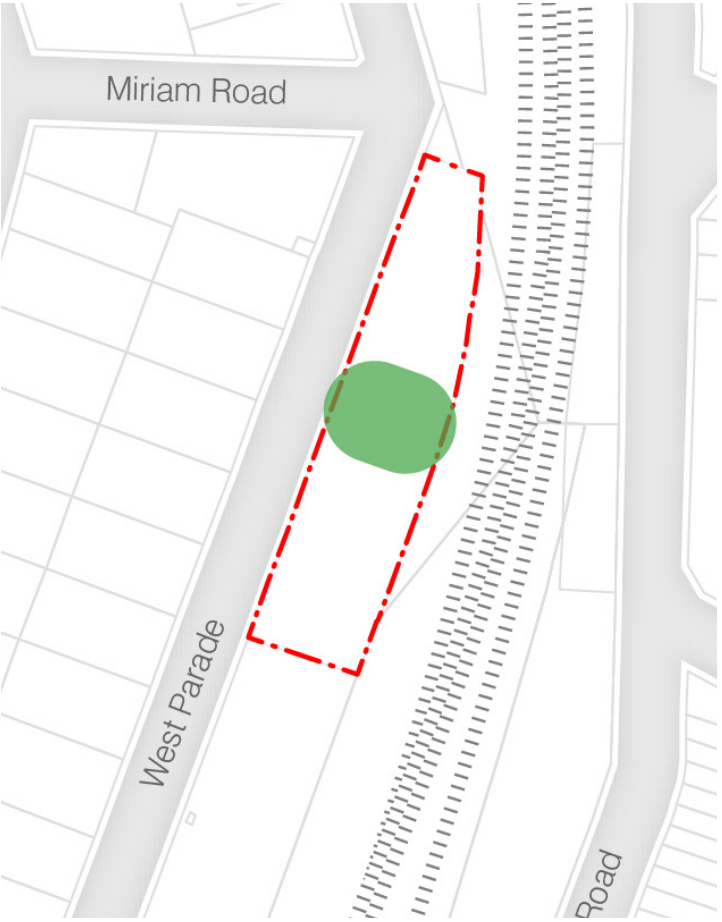
- Provide clear breaks in buildings to reduce bulk and scale and create a diversity of built form across the site.
- Buildings are to be legibly broken up to minimise bulk and offer clear view lines through the site
- No building should exceed 40m in length.



- Legend
- Subject Site
 - Indicative Built Form Edges
 - Indicative Upper Levels
 - Indicative Podium Levels

Human scale street wall

- Create a human-scaled street wall along West Parade that forms a transition between low-density residential area to the north and the town centre to the south.
- Set upper levels back to reduce the bulk and scale of development from the street.



- Legend
- Subject Site
 - Indicative Communal Open Space

Central Communal Open Space

- Create a central, landscaped open space at ground level that is continuous across the site from east to west.
- Communal open space must be useable and allow for social and recreational activities, have optimal solar access, and offer clear views through the site.
- Landscape designs for communal open space must provide deep soil and substantial tree planting.

Architecture objectives

The following architecture objectives have been developed to inform future built form and design outcomes for the site.

The architecture objectives address building design and address issues relating to streetscape and facade, communal open space and noise.

The architecture objectives expand on the design objectives and ensure high quality residential design outcomes for the site.

The design objectives must be addressed in future project specific development applications for the site.



Create Attractive Entries

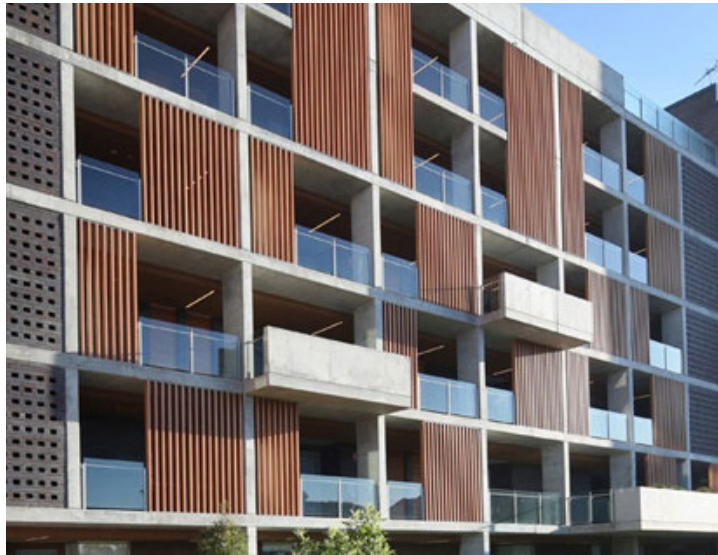
Utilise attractive treatments and landscaping to active residential entries for each ground floor dwelling and residential lobby. Massing highly detailed architectural elements within the first two storeys reinforces the human scale.

Provide Transparent Lobbies Where Possible

Tall, naturally-lit residential lobbies with visual continuity through to the rear of the building create an attractive sense of openness.

Create Inviting Communal Open Space

Communal open spaces at ground and roof (or podium roof) levels should be positioned to maximise solar access, and landscaped to provide comfortable spaces for gathering in.



Mitigate Noise

Use architectural treatment to mitigate rail and road noise, and landscaping treatments to enhance air quality.

Create Legible Separation Between Blocks

Separation between blocks provides visual relief to the streetscape and should offer views of the sky and of landscaping between buildings.

Facade Design

Utilise a harmonious variety of materials and colours to create visual interest and to diffuse the scale of the building, particularly on façades with few windows.

Roof Design

Contemporary roof forms should include modulation of building form that provide shadow and depth to the building. Eaves should be lined in high quality materials and gutters and downpipes considered as an integral part of the design.

Chapter 4

The proposal

Proposed modification

The proposed modification seeks to modify the Concept Plan Approval to;

- Introduce a mix of social and affordable housing that is consistent with the Future Directions for Social Housing in NSW
- Remove the proposed commercial and retail uses
- Amend the proposal to achieve compliance with the Apartment design Guidelines

Proposed building area

The adjacent plan shows the proposed building area, with the approved envelopes overlaid. The proposed building area provides an expanded envelope in which the approved GFA and compliance with the ADG can be achieved. The proposed building area establishes setbacks that will allow future development to comply with ADG.

The proposed building envelope has been simplified and slightly enlarged to increase flexibility and provide greater design variation. This approach will ensure a flexible and adaptable building area, to enable a high-quality design response for the site.

The proposed building area will facilitate improved residential design outcomes in line with the ADG, but will allow greater design variation through the development partnership process and detailed design phase.

The proposed building area will ensure residential amenity is protected and enhanced, and includes a consistent front setback to ensure future development is consistent with the local streetscape character and residential amenity along West Parade. The building envelope also increases the setback to the southern boundary to ensure future development can comply with the requirements in the ADG.

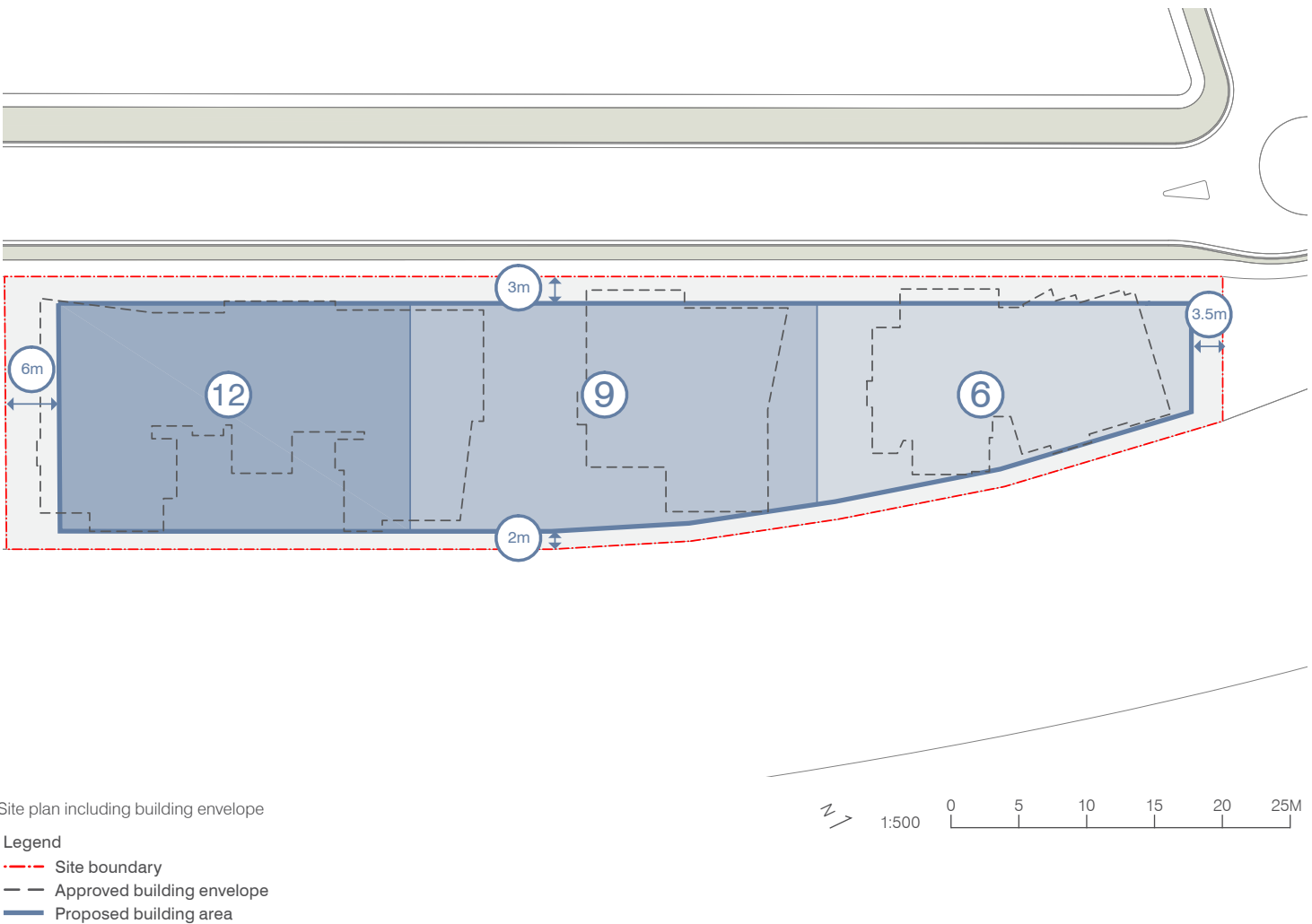
The proposed building area will not facilitate any increase in residential density. Despite the proposed building area expanding to accommodate better design outcomes and increased flexibility, the total approved GFA of 13,149 square metres will not increase.

The proposed modification does not seek any increase to the total approved GFA of 13,149 square metres. The proposed modification seeks to transfer the approved commercial and retail floorspace, of 619 square metres and 71 square metres respectively, to residential GFA. This will result in an increase in residential GFA from 12,459 square metres to 13,149 square metres. The following characteristics describe the proposed modification:

Setbacks

- Setback from western site boundary min. 3m
- Setback from eastern site boundary min. 2m
- Setback from northern site boundary min. 3.5m (allowing habitable rooms at the northern facade as the lot north of the subject site is non-residential)
- In order to comply with ADG, setback from southern site boundary should be min. 6m (allowing non-habitable rooms on the southern facade as the lot south of the subject site is residential)

For an indication of how buildings could be designed within this envelope refer to the reference design prepared by AJC in Chapter 5 Assessment



Proposed heights

The modification proposes three heights zones within the proposed building area to create distinct height zones of 6, 9 and 12 storeys across the site.

The proposed height zones range from 6 storeys to 12 storeys, creating a transition in height from the greatest height closest to the West Ryde Town Centre, to lower heights in the residential area to the north.

The adjacent elevation shows the proposed building envelope within which the development may be located. The proposed modification does not seek any increase to the approved maximum building height of 12 storeys.

The additional height can be accommodated with no additional impacts to adjoining properties, and will enable future buildings to comply with the requirements of ADG, particularly building separation.

Testing undertaken by AJC has demonstrated that the approved GFA cannot be accommodated within the approved building envelope in the Concept Plan Approval. Therefore, a minor increase in building height is proposed in the northern portion of the site to enable the development to maintain its yield while conforming with updated apartment design controls.

The proposed height increase is required to ensure future development can comply with the ADG and to deliver a high standard of amenity for occupants and nearby residents alike.

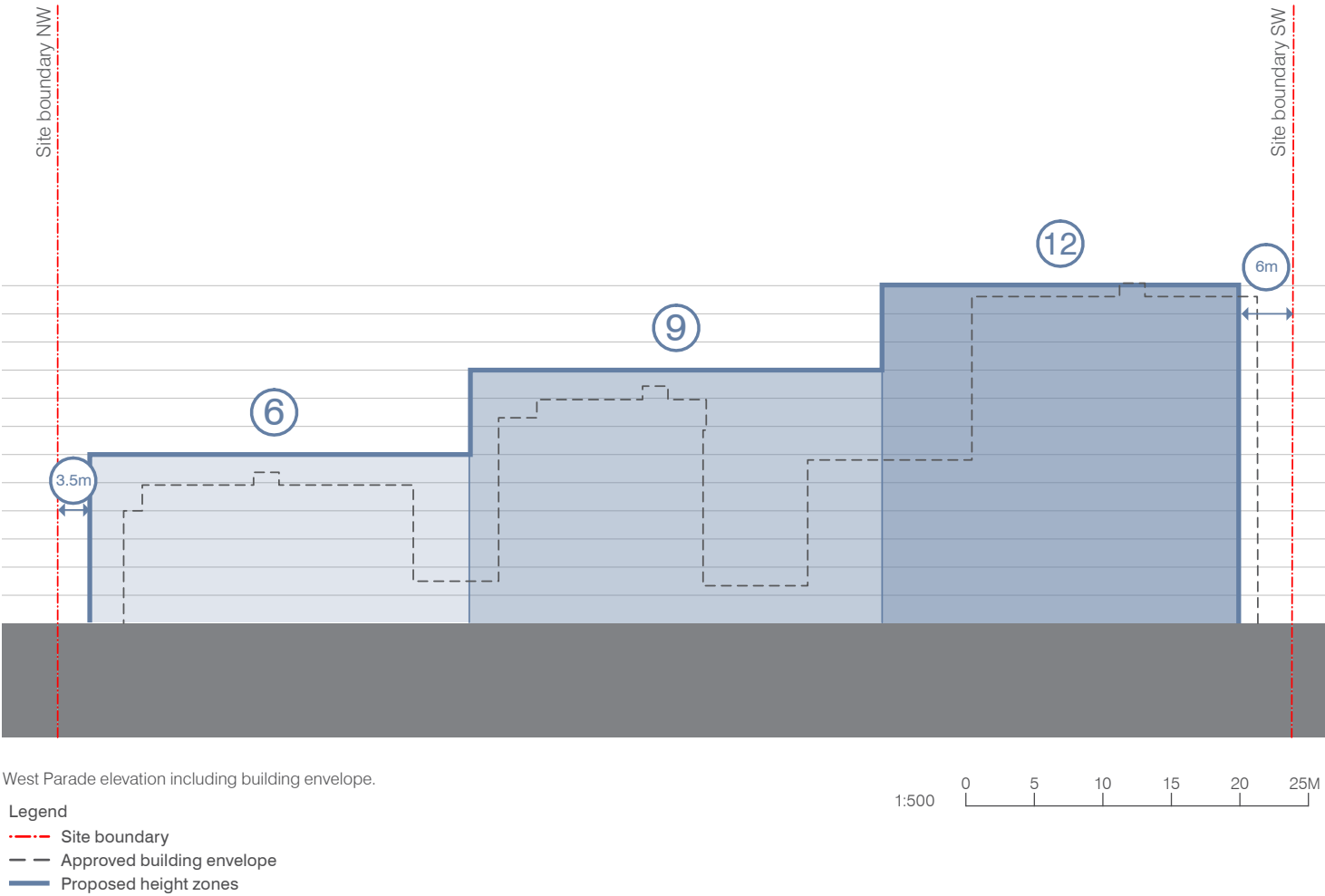
For an indication of how future buildings could be designed within this envelope refer to the reference design prepared by AJC in Chapter 5 Assessment.

Proposed land uses

The proposed modification seeks to remove the approved commercial and retail floorspace, which is to be replaced with residential floorspace. The removal of commercial and retail floorspace is required as at the time of approval in 2010, the NSW Government had plans for Family and Community Services (FACS) office within the development.

However, FACS have since found alternate office accommodation within the local area and a FACS office is no longer required. There has also been a change within this time, and the presence of a FACS office within the development is not considered conducive to a fully integrated housing development where the social housing component is indistinguishable from the private housing.

The proposed modification would result in a residential outcome for the site, which is consistent with the R4 High Density Residential zone, and the existing residential neighbourhood character. The proposal will facilitate a mix of social, affordable and private housing, consistent with Future Directions for Social Housing in NSW



Reference Design

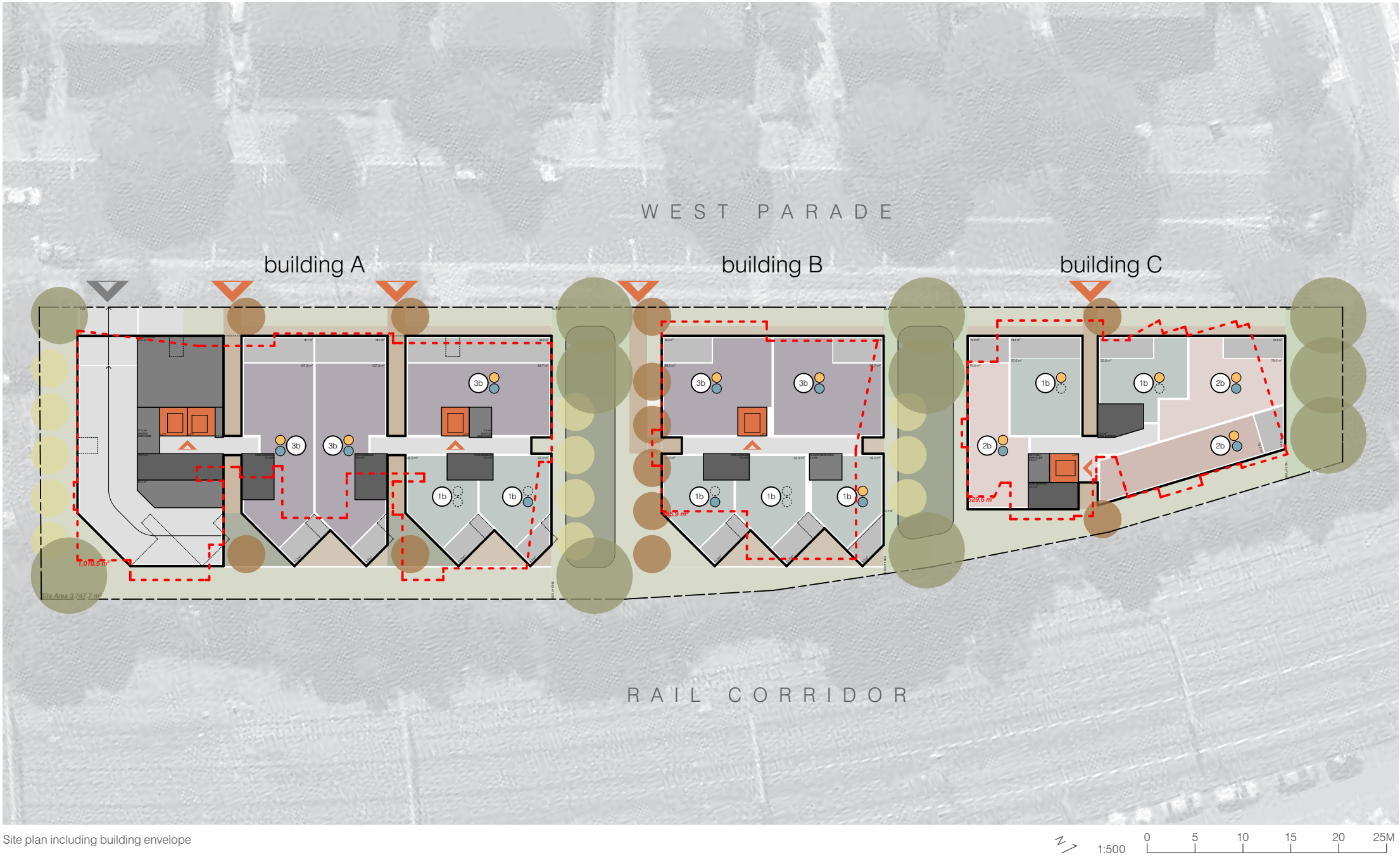
This plan, prepared by AJC on 6 February 2017, shows how buildings on the site could be designed achieving the GFA of 13,159 square metres and meeting the requirements of SEPP 65 and the ADG

The reference design is consistent with the approved GFA and incorporates a 2m upper level setback as required by the current approval.

The reference design provides for 147 apartments and 117 car parking spaces. A summary of the reference design is provided in the table below.

The reference design demonstrates that a high quality residential design can be accommodated within the building area. AJC's reference design is documented in Appendix A.

| Reference Design | |
|--------------------------|----------------------|
| Max Height (storeys) | 6 - 12 storeys |
| FSR | 3.2:1 |
| Residential GFA | 11,920 square metres |
| Apartments | 147 |
| Communal open space | 990 square metres |
| Deep soil | 315 square metres |
| Indicative apartment mix | 40% 1-bedroom |
| | 50% 2-bedroom |
| | 10% 3 -bedroom |
| Parking | 117 spaces |



Apartment Design Guide Summary

New residential flat buildings are be subject to the requirements of State Environmental Planning Policy No. 65 (SEPP 65). The Apartment Design Guide (ADG) is the supporting document to this policy which provides clear guidelines for best practice urban design.

The proposed modification has been tested to ensure future development can comply with the requirements of the ADG. A summary of the key design requirements in the ADG is provided below.

Local Context Guidelines

Building Depth

Apartments should generally be between 12-18 metres in width between glazing lines. Building depths beyond 18m may be able to be achieved where appropriate access to light and ventilation can be demonstrated: for example in a corner location.

Building Separation

- Buildings to 12 metres in height (4 storeys)
- 12m between habitable rooms / balconies
 - 9m between habitable rooms / balconies and non-habitable rooms
 - 6m between non-habitable rooms

- Buildings to 25 metres in height (5 - 8 storeys)
- 18m between habitable rooms / balconies
 - 12m between habitable rooms / balconies and non-habitable rooms
 - 9m between non-habitable rooms

- Buildings over 25 metres in height (9 storeys and over)
- 24m between habitable rooms / balconies
 - 18m between habitable rooms / balconies and non-habitable rooms
 - 12m between non-habitable rooms

Street, Side, and Rear Setbacks

Setbacks are generally determined by the local context, especially where a predominant building line to the street is established.

Site Design Guidelines

Communal Open Space

The area of common open space should be at least 25% of the site area, and should achieve a minimum of 50% direct sunlight to the principal useable part of the communal open space for a minimum of 2 hours during the mid-winter solstice.

Deep Soil Zones

A minimum of 7% of the site area should be a deep soil zone, with minimum dimensions of 3m for sites greater than 650m², and 6m for sites greater than 1,500m².

Visual Privacy

Minimum separation between windows and balconies is based on whether rooms are habitable (generally living and sleeping spaces) or non-habitable (generally service spaces):

| Building Height: | Habitable: | Non-Hab.: |
|---------------------------|------------|-----------|
| – Up to 12m (4 storeys) | 6m | 3m |
| – Up to 25m (5-8 storeys) | 9m | 4.5m |
| – Over 25m (9+ storeys) | 12m | 6m |

Pedestrian Access and Entries

Building entries should provide a clear identifiable entry point for the development, and should be frequently spaced to activate the street. Ground floor apartments should have direct access from the street.

Vehicle Access

Car park entries should be minimised in size and visual prominence, and located away from pedestrian entries.

Bicycle and Car Parking

The parking strategy for the development should take into account the site's proximity to public transport and minimise car dependency where possible. On-grade car parking should be minimised and preference to underground parking where possible.

Building Design Guidelines

Solar and Daylight Access

At least 70% of apartments in Sydney, Newcastle, and Wollongong should receive a minimum of 2 hours direct sunlight in mid-winter. In other areas, the minimum is 3 hours of winter sun. In all areas, a maximum of 15% of apartments may receive no sun in mid-winter.

Natural Ventilation

- Building depths of cross-through apartments should be a maximum of 18 metres
- 60% of residential units should be naturally cross ventilated.

Ceiling Heights

Minimum ceiling heights measured from Finished Floor Level (FFL) to Finished Ceiling Level (FCL):

- Habitable rooms: 2.7m
- Non-habitable rooms: 2.4m
- 2-storey apartments: 2.7m main living area floor
2.4m second floor
- Attic spaces: 1.8m
- If located in mixed use areas:
3.3m for ground and first floors (for flexibility)

As a rule-of-thumb this would require at a minimum:

- 4m floor to floor for ground level (4.2m desirable)
- 3m floor to floor for upper levels at a minimum. (3.2m desirable)

Apartment Size and Layout

Minimum apartment sizes are for one bathroom.

- Studio: 35m²
- 1 bed apartment: 50m²
- 2 bed apartment: 70m²
- 3 bed apartment: 95m²
- Second bathrooms add 5m²
- Additional bedrooms add 12m²

Environmental performance guidelines:

- All habitable rooms must have windows of not less than 10% of the floor area of the room
- Daylight may not be borrowed from other rooms.
- Habitable room depths have a maximum depth of 2.5x the ceiling height
- Maximum habitable room depths for open plan spaces is 8m.

Household activity requirements:

- Minimum area of 10m² for master bedrooms and 9m² for other bedrooms (excluding wardrobes)
- Minimum 3m dimension for bedrooms (excluding wardrobes)
- Minimum 3.6m dimension for living rooms in studio and 1 bedroom apartments, and 4m for living rooms in 2 and 3 bedroom apartments.
- Minimum 4m width of cross-through apartments.

Private Open Space and Balconies

| | Min. Size: | Min Depth: |
|---|------------------|------------|
| – Studio apartment: | 4m ² | - |
| – 1 bed apartment: | 8m ² | 2m |
| – 2 bed apartment: | 10m ² | 2m |
| – 3+ bed apartment: | 12m ² | 2.4m |
| – Apartments at ground or podium level should have private open space with a minimum 15m ² area and 3m depth instead of a balcony. | | |

Common Circulation and Spaces

- Maximum of 8 apartments per circulation core per level
- Maximum of 40 apartments per lift for buildings of 10 storeys and over.

Storage

At least 50% of the required storage is to be located within each apartment:

- Studio apartments: 4m³
- 1 bed apartments: 6m³
- 2 bed apartments: 8m³
- 3+ bed apartments: 10 m³

Apartment Mix

Developments should incorporate a variety of apartment types so as to encourage cultural and social diversity. Councils often have desired mix targets.

Facade Design

Façades should be composed of varying elements that add definition to the building composition.

Landscape Design

Landscaping contributes to the amenity of residential developments as well as to the ecology of the city.

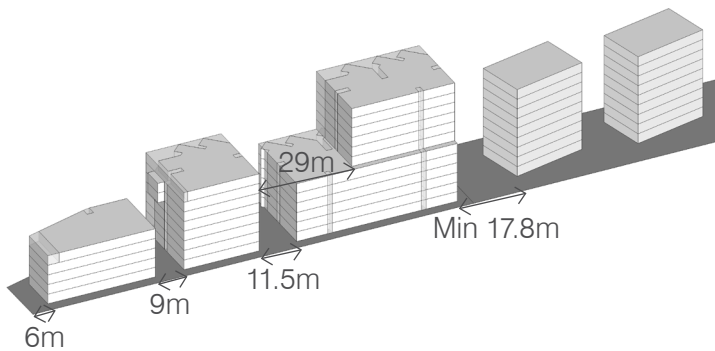
Chapter 5

Assessment

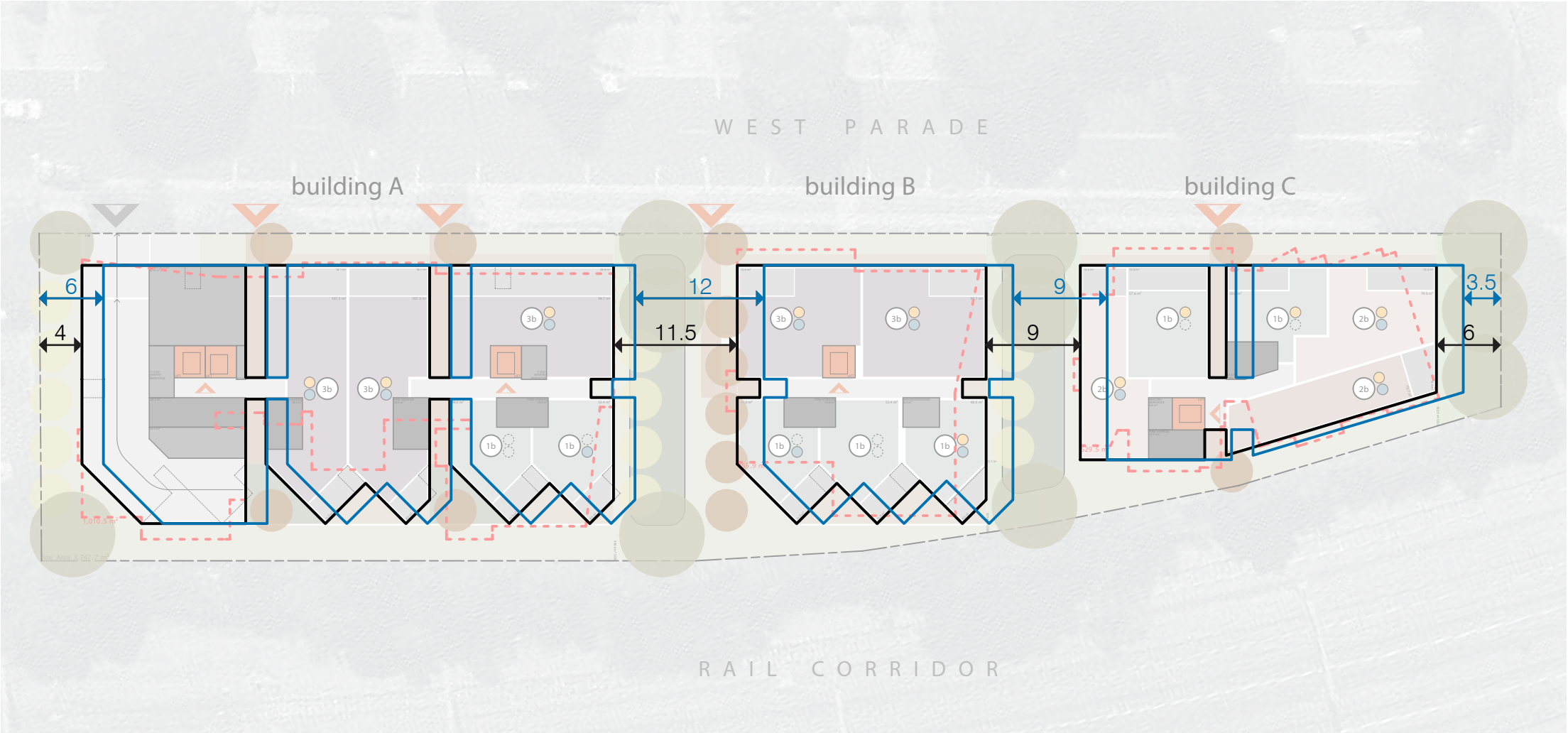
Building separation

This plan, based on the AJC design, shows how buildings on the site could be moved about 2m north and still meet the ADG requirements (indicated by the blue outline).

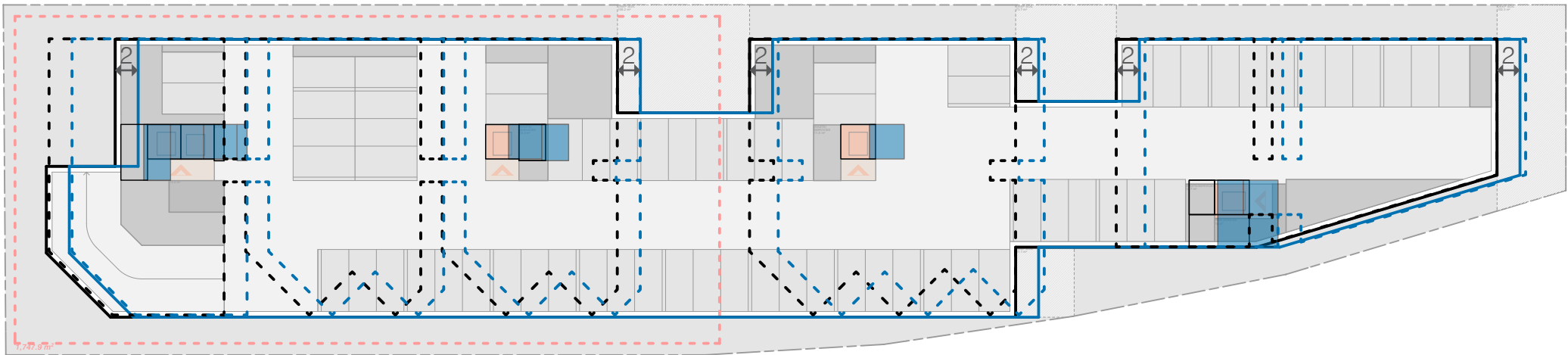
- Advantages:
- The 6m setback to the southern boundary would allow the proposal to comply with ADG, providing that non-habitable to non-habitable rooms face the boundary
 - The lot to the north of the site is unlikely to develop for residential use, in which case, visual privacy for the northernmost building is unlikely to an ADG compliance requirement.



Axonometric view

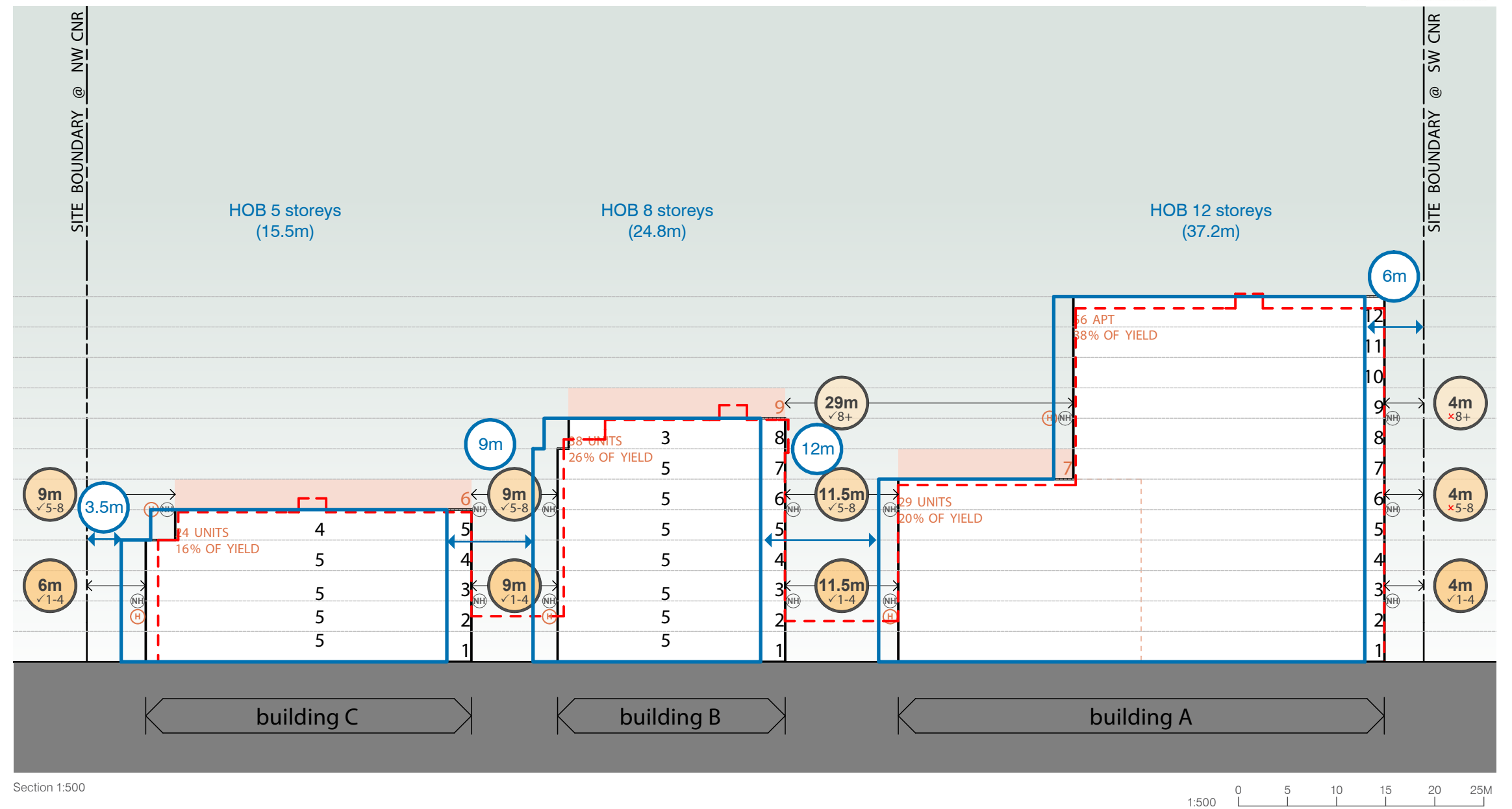


Site plan including building envelope



Basement plan including building envelope





Solar access

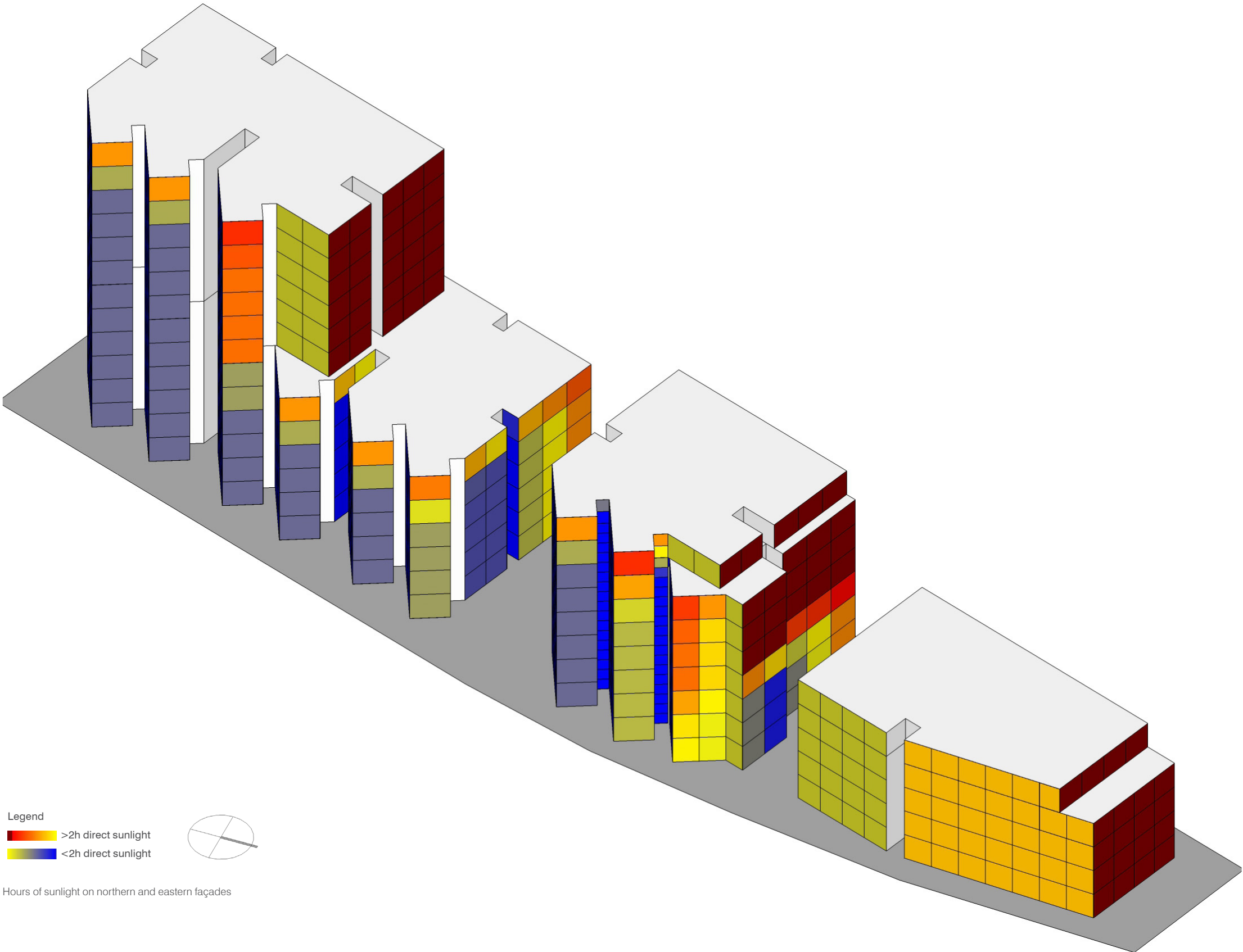
Solar Access Summary

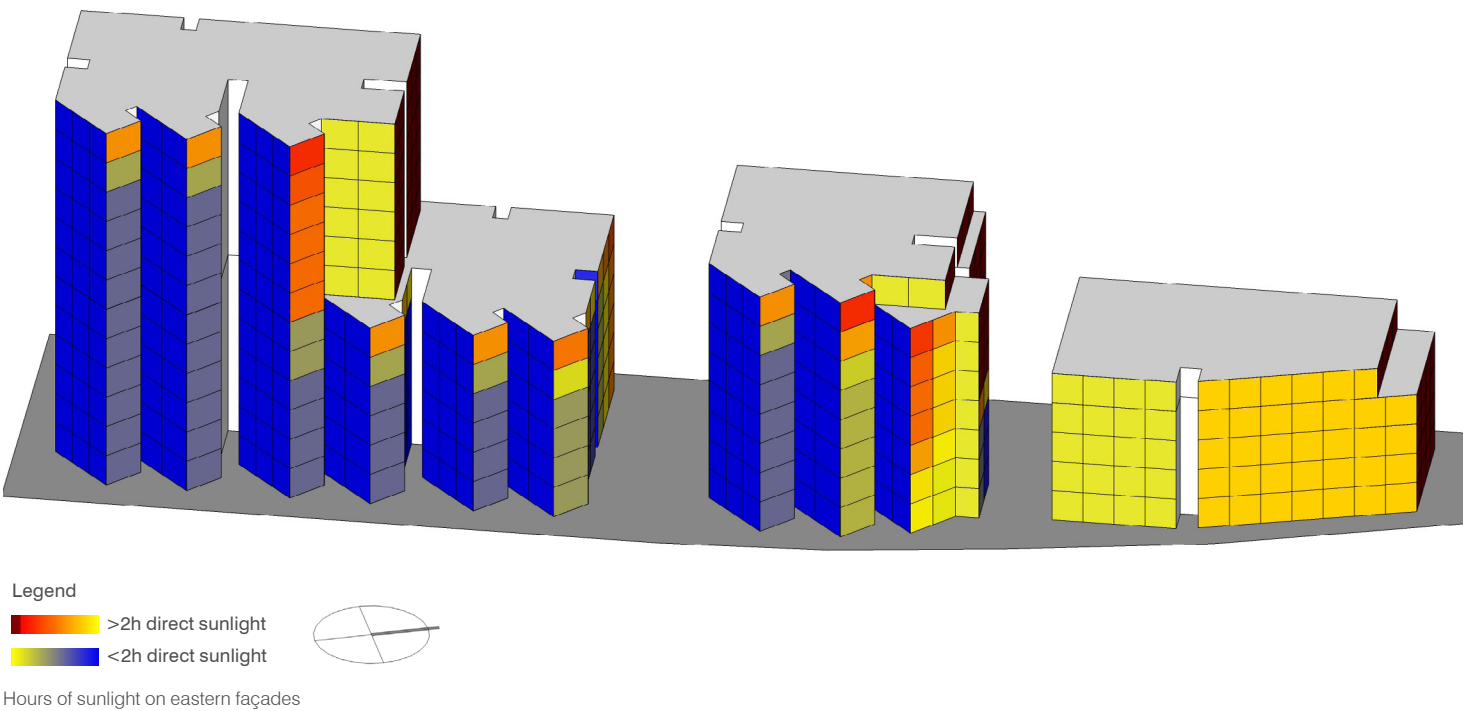
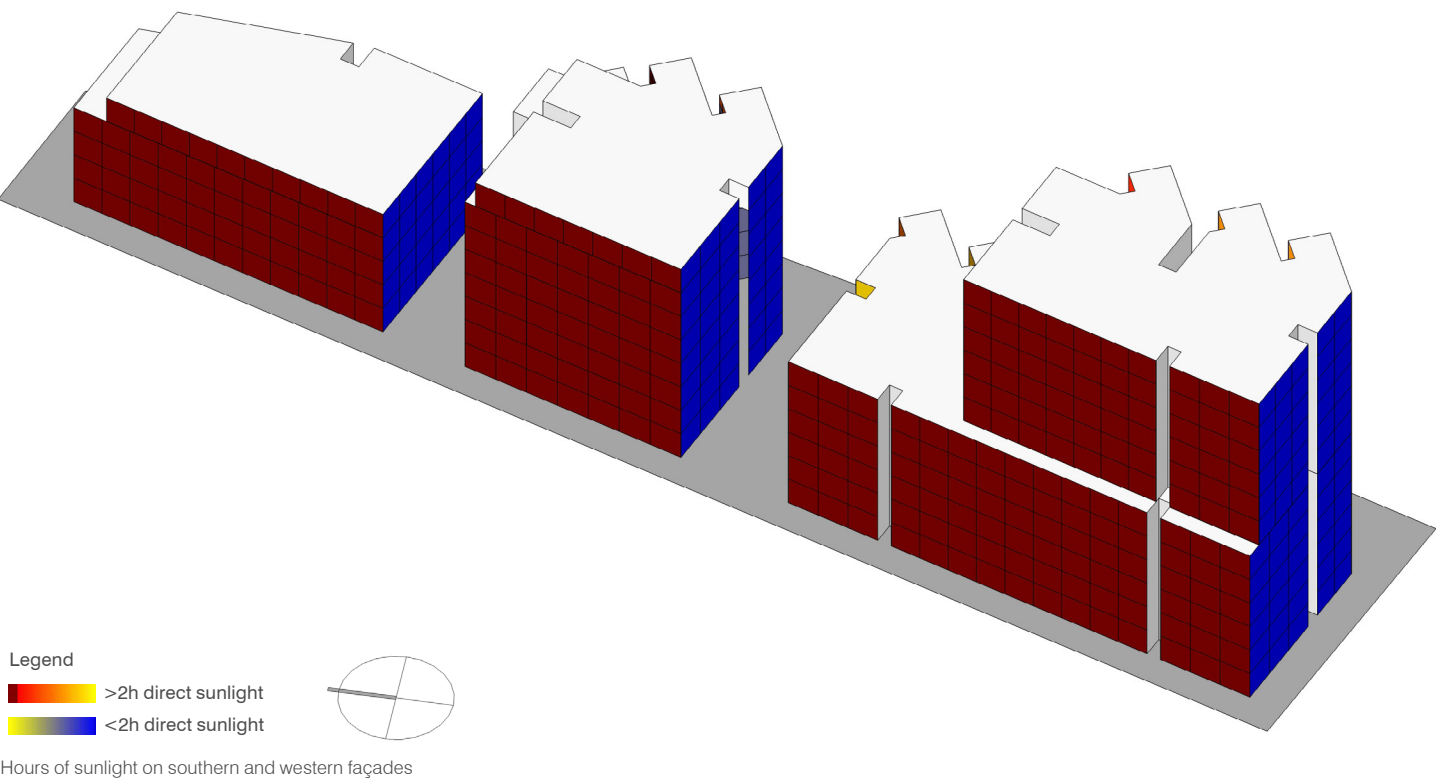
Direct sunlight to the indicative built form of the master plan based on the AJC reference design has been assessed for winter solstice (June 21) between the hours of 9am to 3pm. The ADG requirement is for a minimum of 70% of apartments to receive 2 hours of direct sun between 9am and 3pm on June 21.

The model images illustrate that the indicative building envelope is capable of achieving the minimum requirement.

The floorplans on the following images show the complying apartments for each level in indicative floorplans.

76% OF TOTAL APARTMENTS
ACHIEVE REQUIRED SOLAR
ACCESS





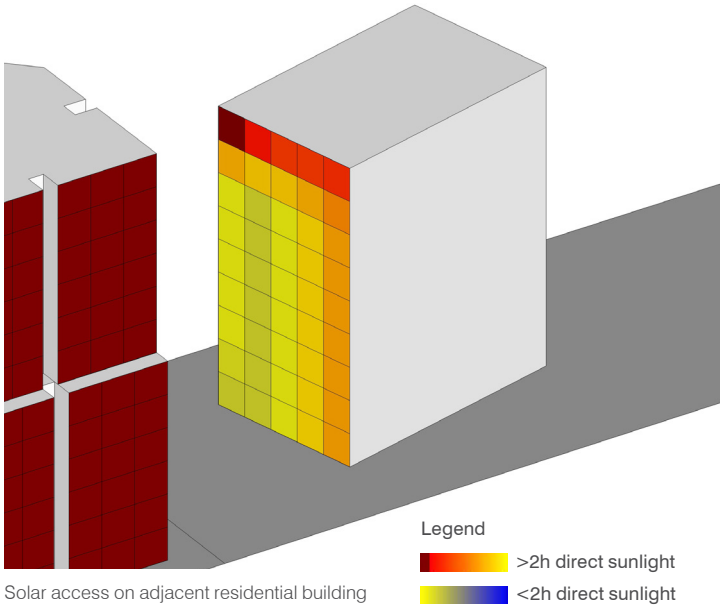
Summary Table

| | Compliant apartments | Total apartments | Compliance Yes / No |
|---------------------------|----------------------|------------------|---------------------|
| Solar access | 112 | 147 | Yes |
| Natural cross ventilation | 95 | 147 | Yes |

Consideration of Overshadowing Impacts

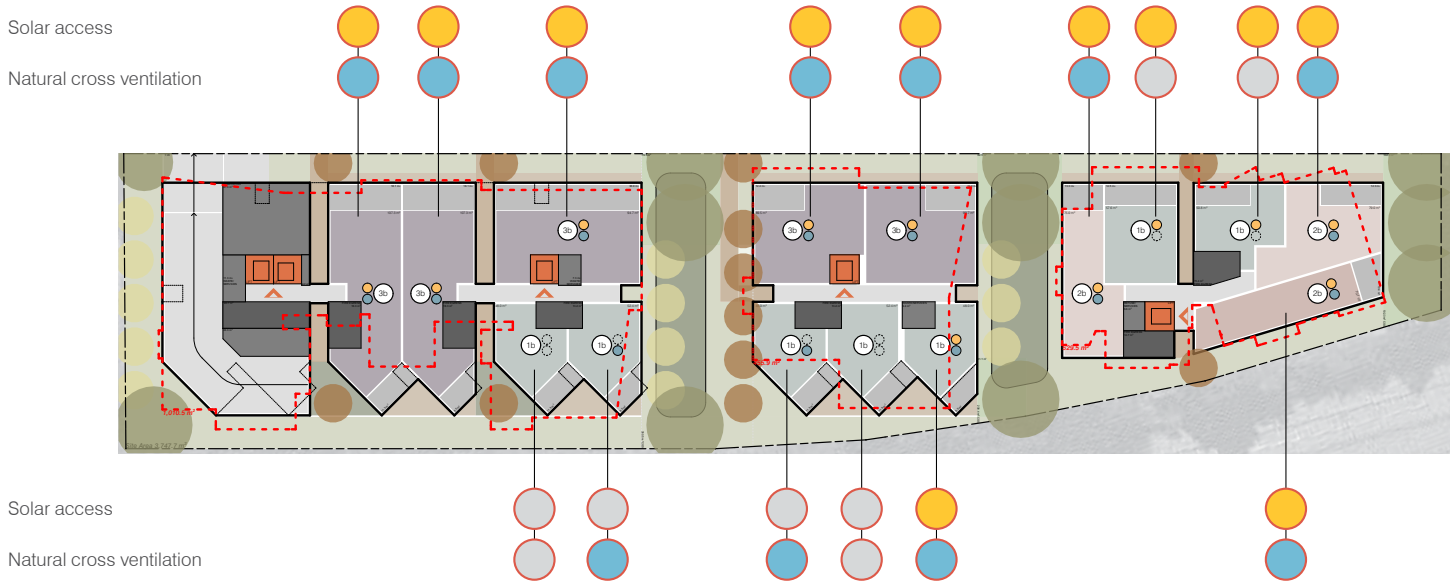
Direct sunlight to the adjacent residential building to the south has been assessed for winter solstice (June 21) between the hours of 9am to 3pm. A minimum of 70% of apartments needs to meet this ADG requirement for solar access.

The model image illustrates that the building envelope will achieve the minimum requirement of sun light access with the proposed building setbacks.



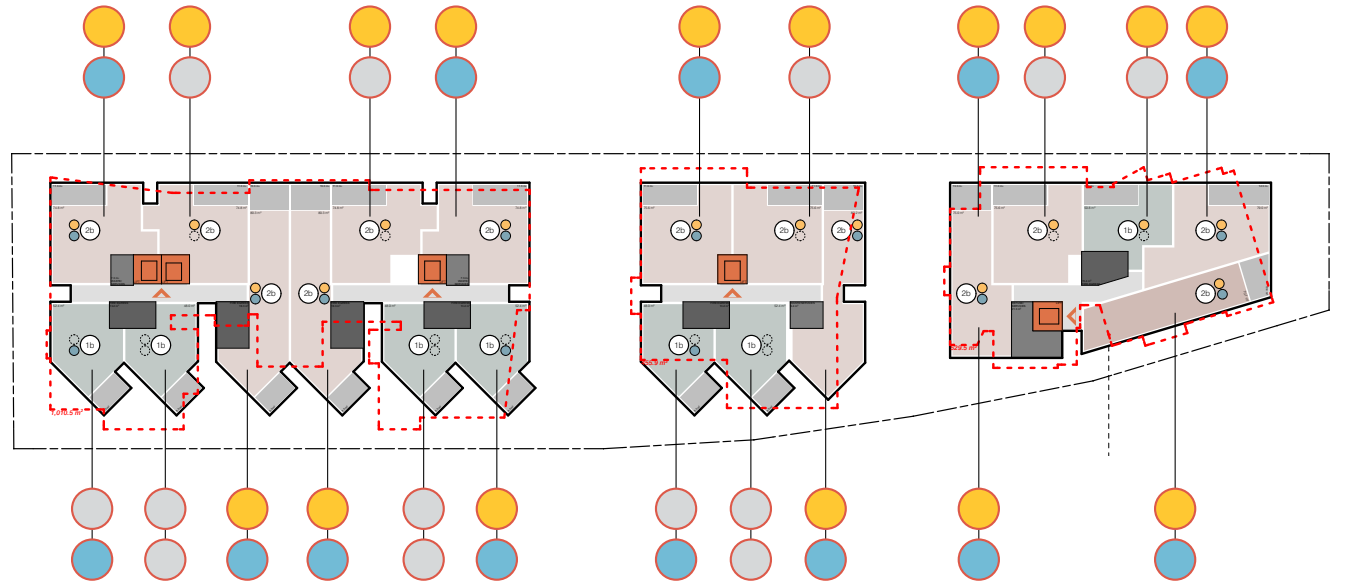
Solar and cross ventilation compliance

Solar Access and Natural Cross Ventilation by Level



Level 01

| | Compliant apartments | Total apartments per level | Compliance Yes / No |
|----------------------------------|-------------------------|----------------------------------|------------------------|
| Solar access | 11 | 15 | Yes |
| Natural cross ventilation | 11 | 15 | Yes |



Level 02

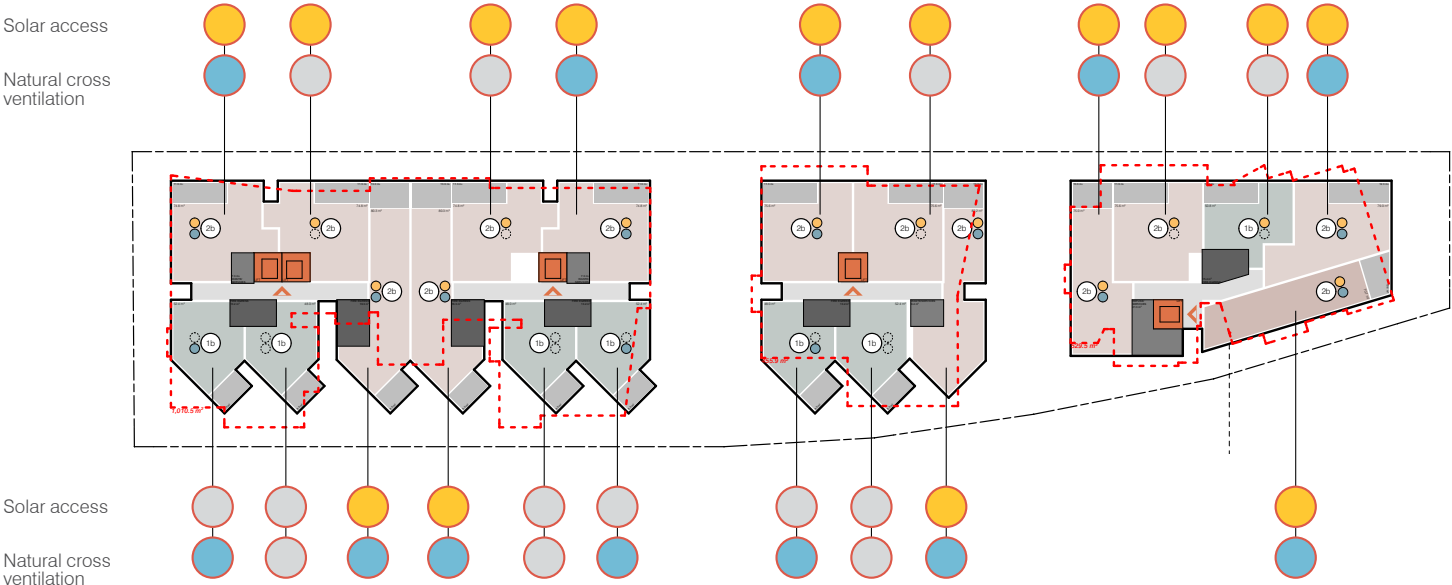
| | Compliant apartments | Total apartments per level | Compliance Yes / No |
|----------------------------------|-------------------------|----------------------------------|------------------------|
| Solar access | 14 | 20 | Yes |
| Natural cross ventilation | 12 | 20 | Yes |

65% OF TOTAL APARTMENTS CAN BE NATURALLY VENTILATED

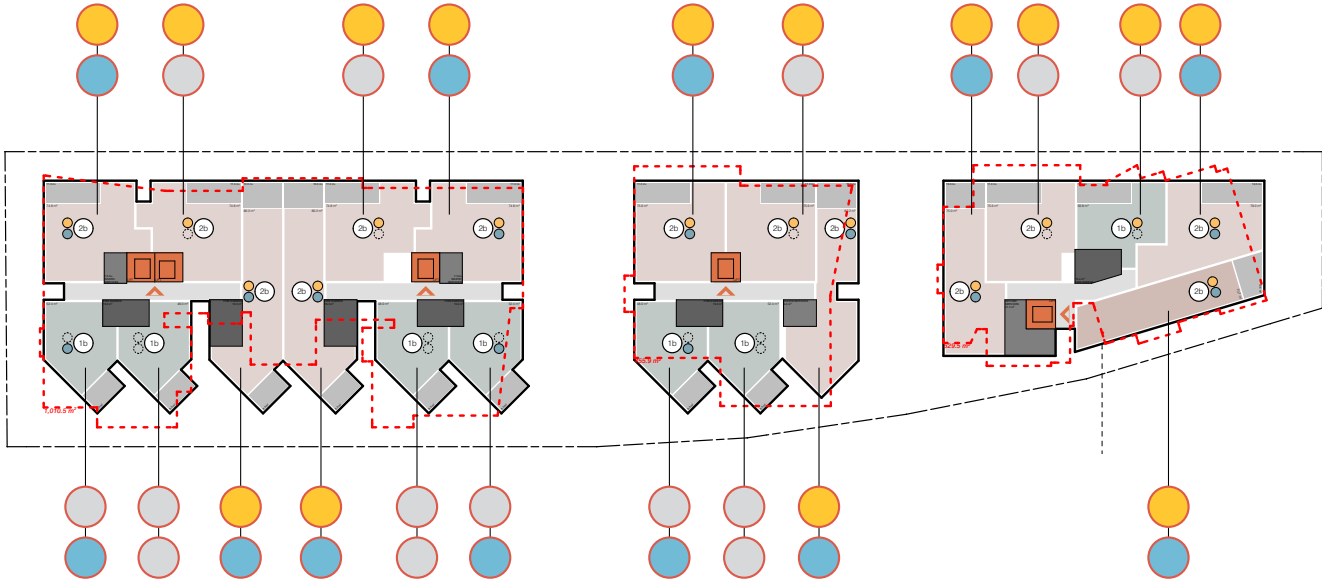
Legend

- Non compliant
- Achieving >2h sun light
- Achieving cross ventilation



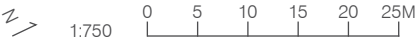


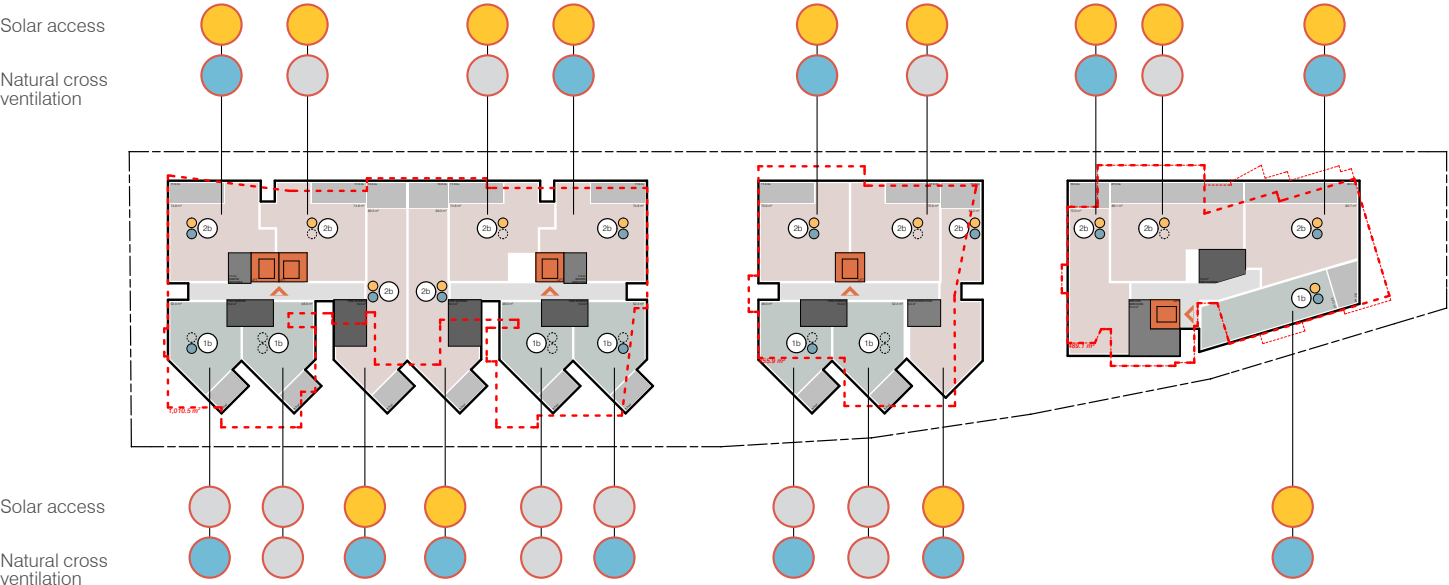
| Level 03 | | | |
|---------------------------|----------------------|----------------------------|---------------------|
| | Compliant apartments | Total apartments per level | Compliance Yes / No |
| Solar access | 14 | 20 | No |
| Natural cross ventilation | 12 | 20 | Yes |



| Level 04 | | | |
|---------------------------|----------------------|----------------------------|---------------------|
| | Compliant apartments | Total apartments per level | Compliance Yes / No |
| Solar access | 14 | 20 | No |
| Natural cross ventilation | 12 | 20 | Yes |

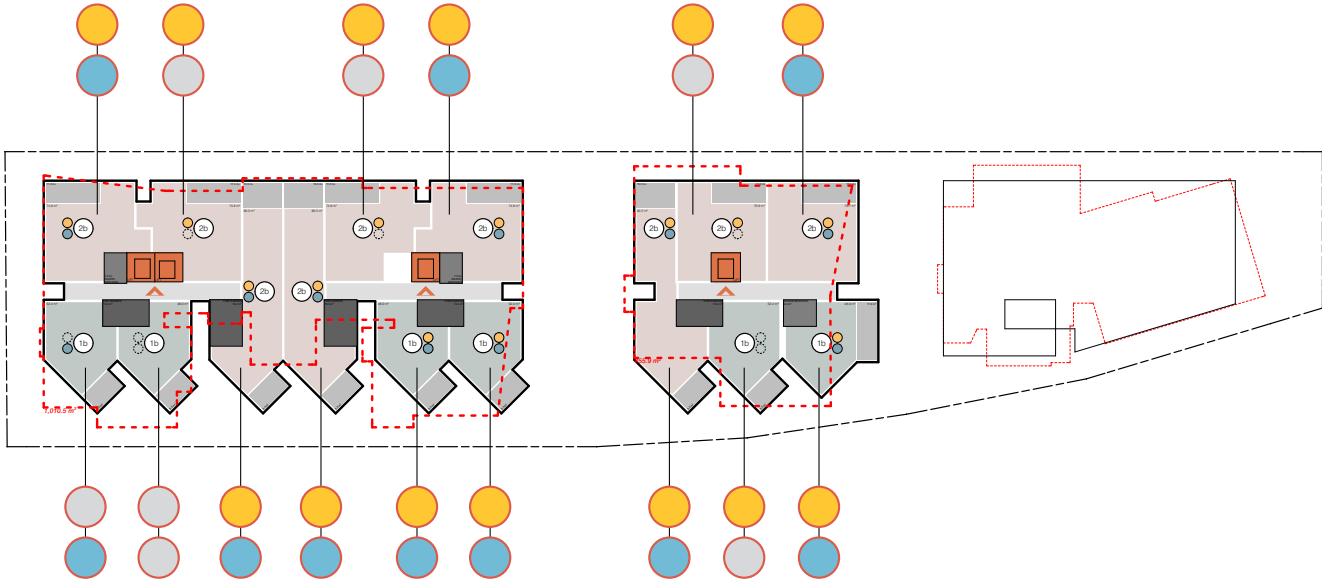
- Legend
- Non compliant
 - Achieving >2h sun light
 - Achieving cross ventilation





Level 05

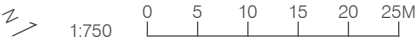
| | Compliant apartments | Total apartments per level | Compliance Yes / No |
|---------------------------|-------------------------|----------------------------------|------------------------|
| Solar access | 13 | 19 | No |
| Natural cross ventilation | 12 | 19 | Yes |

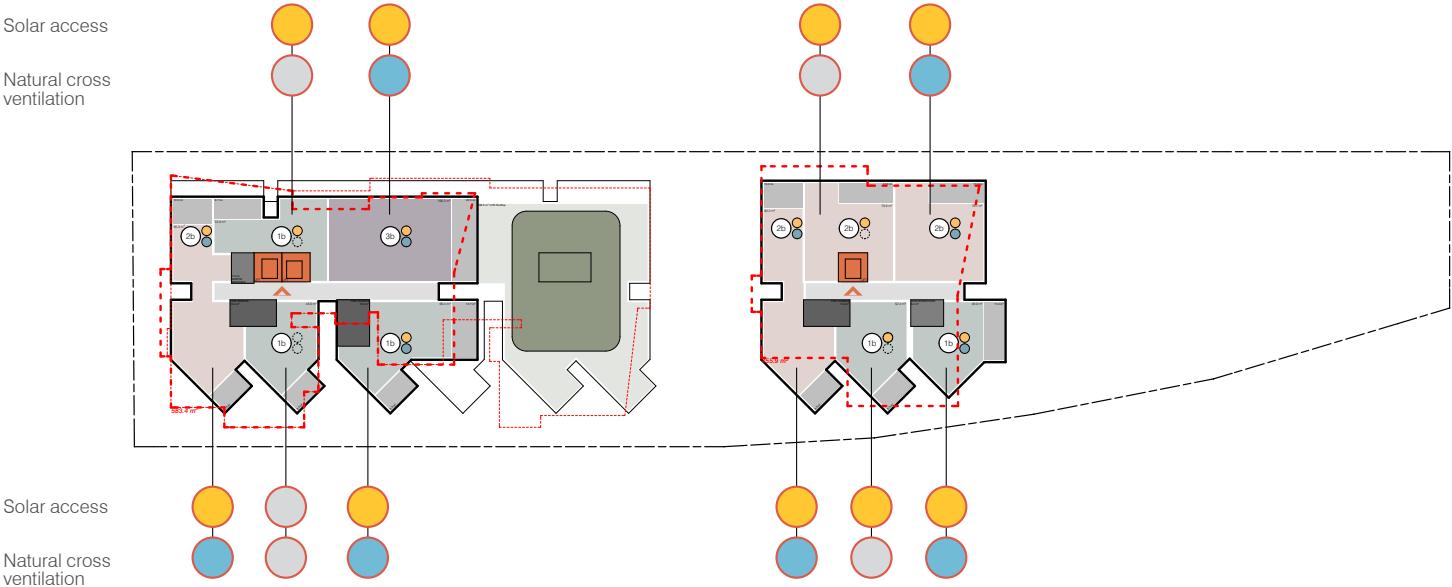


Level 06

| | Compliant apartments | Total apartments per level | Compliance Yes / No |
|---------------------------|-------------------------|----------------------------------|------------------------|
| Solar access | 13 | 15 | Yes |
| Natural cross ventilation | 10 | 15 | Yes |

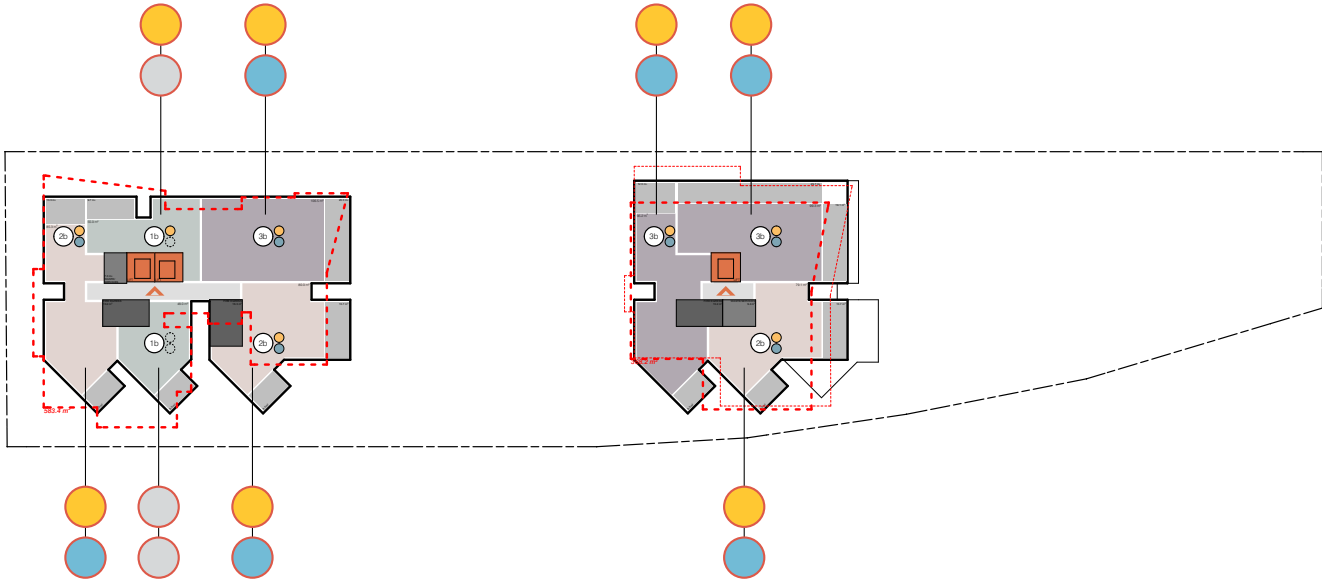
- Legend
- Non compliant
 - Achieving >2h sun light
 - Achieving cross ventilation





Level 07

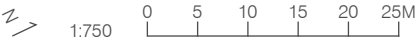
| | Compliant apartments | Total apartments per level | Compliance Yes / No |
|---------------------------|-------------------------|----------------------------------|------------------------|
| Solar access | 9 | 10 | Yes |
| Natural cross ventilation | 6 | 10 | Yes |



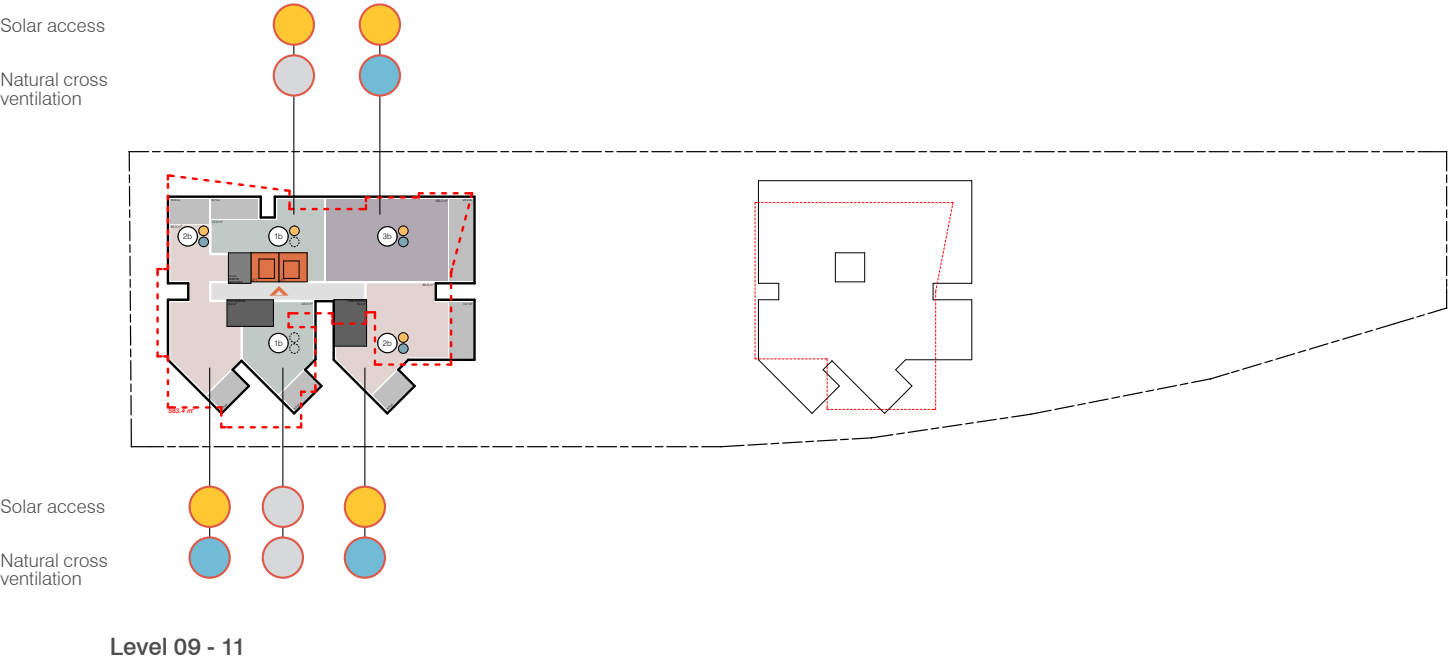
Level 08

| | Compliant apartments | Total apartments per level | Compliance Yes / No |
|---------------------------|-------------------------|----------------------------------|------------------------|
| Solar access | 7 | 8 | Yes |
| Natural cross ventilation | 6 | 8 | Yes |

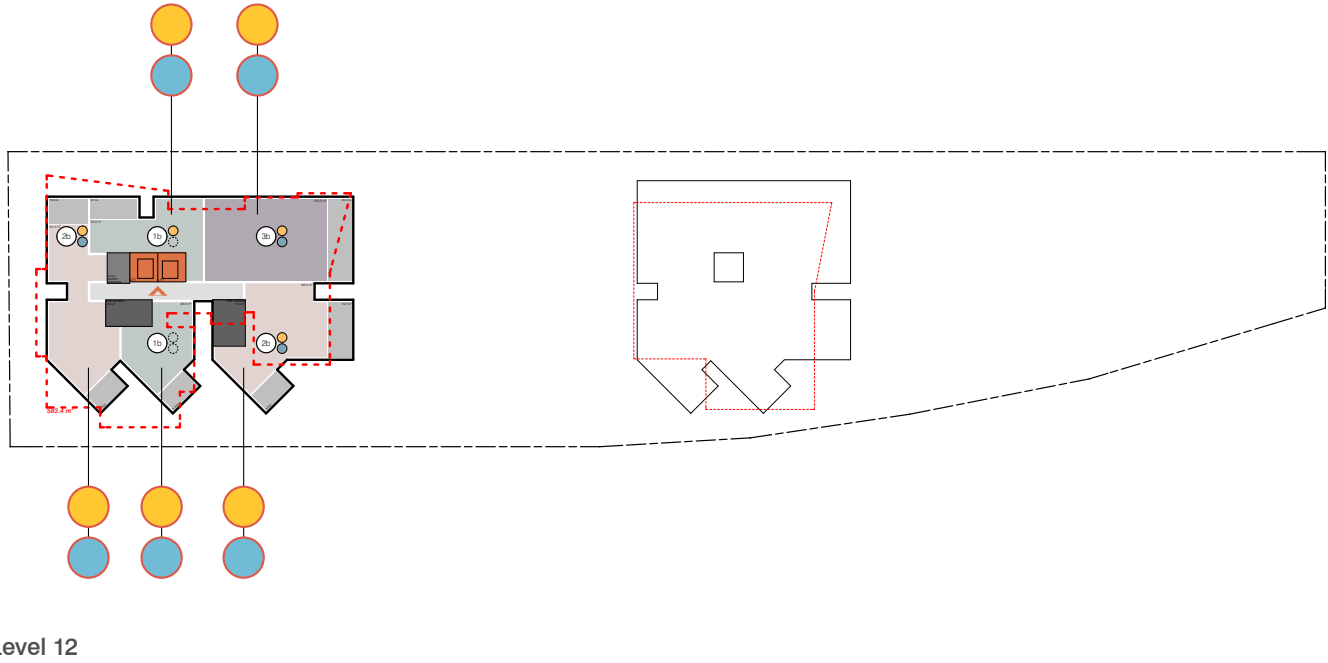
- Legend
- Non compliant
 - Achieving >2h sun light
 - Achieving cross ventilation



Solar and Cross Ventilation Compliance

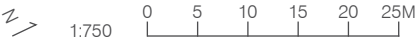


| | Compliant apartments | Total apartments | Compliance Yes / No |
|---------------------------|-------------------------|---------------------|------------------------|
| Solar access | 12 (4*3) | 15 (5*3) | Yes |
| Natural cross ventilation | 9 (3*3) | 15 (5*3) | Yes |



| | Compliant apartments | Total apartments per level | Compliance Yes / No |
|---------------------------|-------------------------|----------------------------------|------------------------|
| Solar access | 5 | 5 | Yes |
| Natural cross ventilation | 5 | 5 | Yes |

- Legend
- Non compliant
 - Achieving >2h sun light
 - Achieving cross ventilation

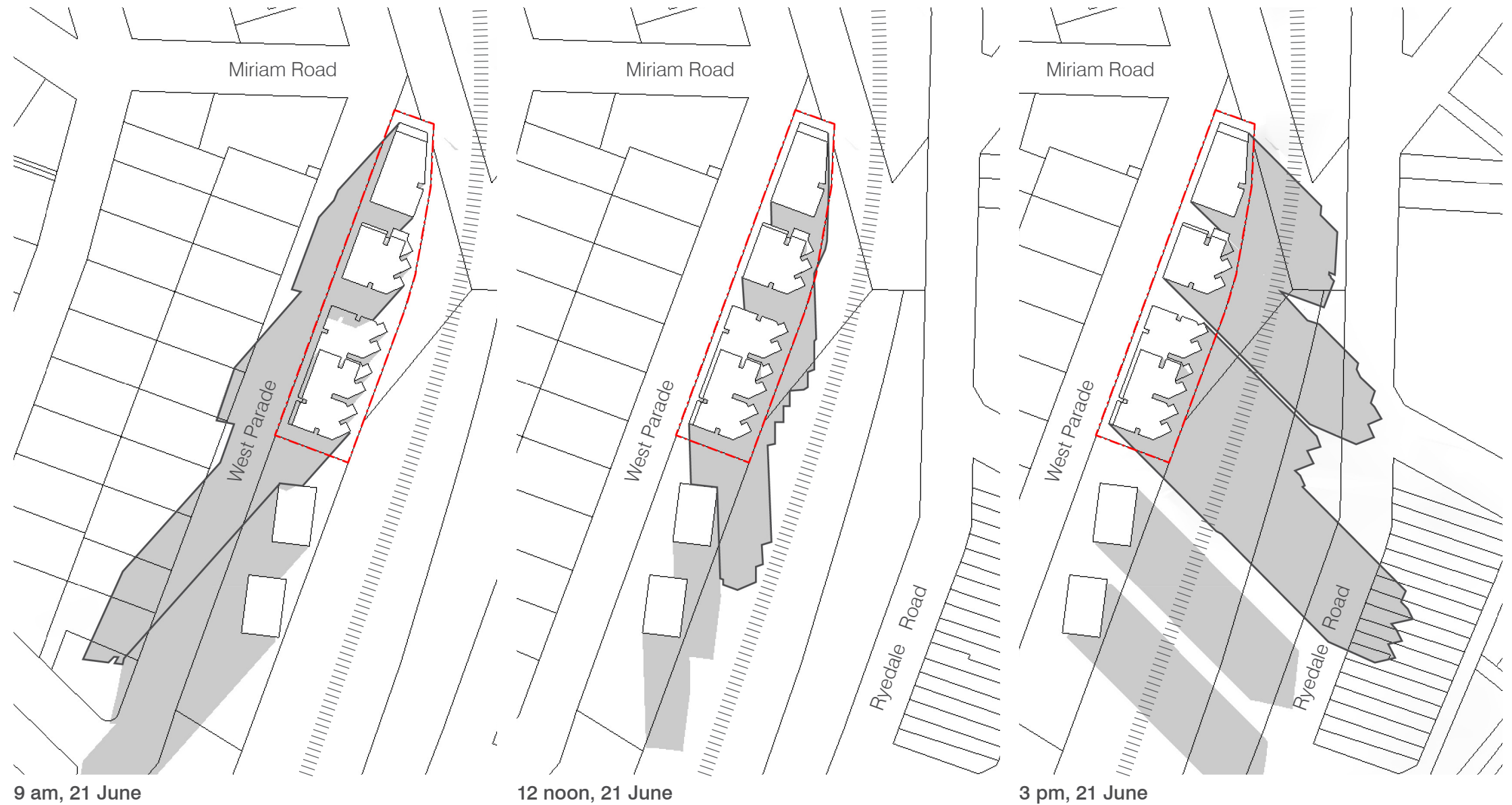


Shadow Analysis

Shadow Analysis of the Proposed Design Modification

This shadow analysis is of the proposed design modification, where the AJC Reference Design has been moved northwards by 2m, creating a 6m setback from the southern boundary to the building edge.

The neighbouring apartment buildings at 57 West Parade have also been modelled for reference. The new shadows cast by the proposed development have been outlined in dark grey.



Legend

--- Subject Site
||||| Train Line

■ Shadows from proposed design

Visual Impact Assessment

Victoria Road at Bowden Street



Existing view

This visual impact assessment is of the proposed design modification, where the AJC Reference Design has been moved northwards by 2m, creating a 6m setback from the southern boundary to the building edge.

This view is from an elevated position on Victoria Road. The mid to upper floors of the proposed development are visible, and rise slightly higher than the existing apartment buildings at 57 West Parade. This group of towers may help to define the West Ryde local centre. The proposed development is considered to have a moderate visual impact.



Proposed development view



Terry Road at Marlow Lane



Existing view

This visual impact assessment is of the proposed design modification, where the AJC Reference Design has been moved northwards by 2m, creating a 6m setback from the southern boundary to the building edge.

This view is from part way up the hill that Terry Road climbs towards the north from West Ryde. The mid to upper floors of the proposed development are visible, and rise slightly higher than the existing apartment buildings at 57 and 1-55 West Parade. A linear built form may be established along the railway at the West Ryde local centre. The proposed development is considered to have a moderate visual impact.



Proposed development view



Chapter 6

Recommendations

Proposed concept plan

The proposed modification will introduce a building area, to allow a flexible and responsive design approach. There is no change to total GFA or maximum height.

The proposal aims to introduce three height zones increasing from 6 storeys at the northern end to 12 storeys at the southern end of the site

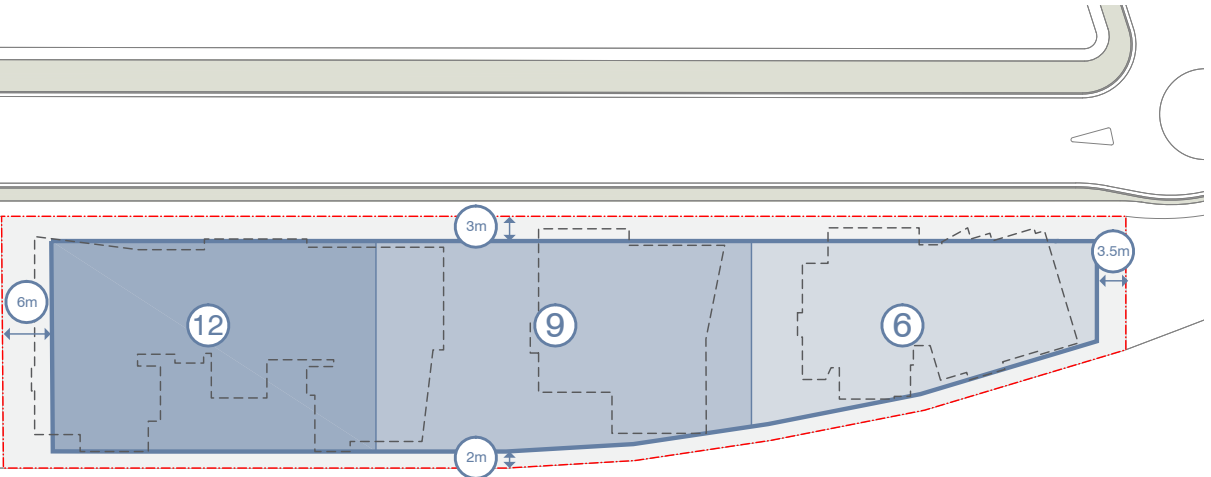
To ensure future development can comply with the ADG, the following setbacks are recommended.

Setbacks

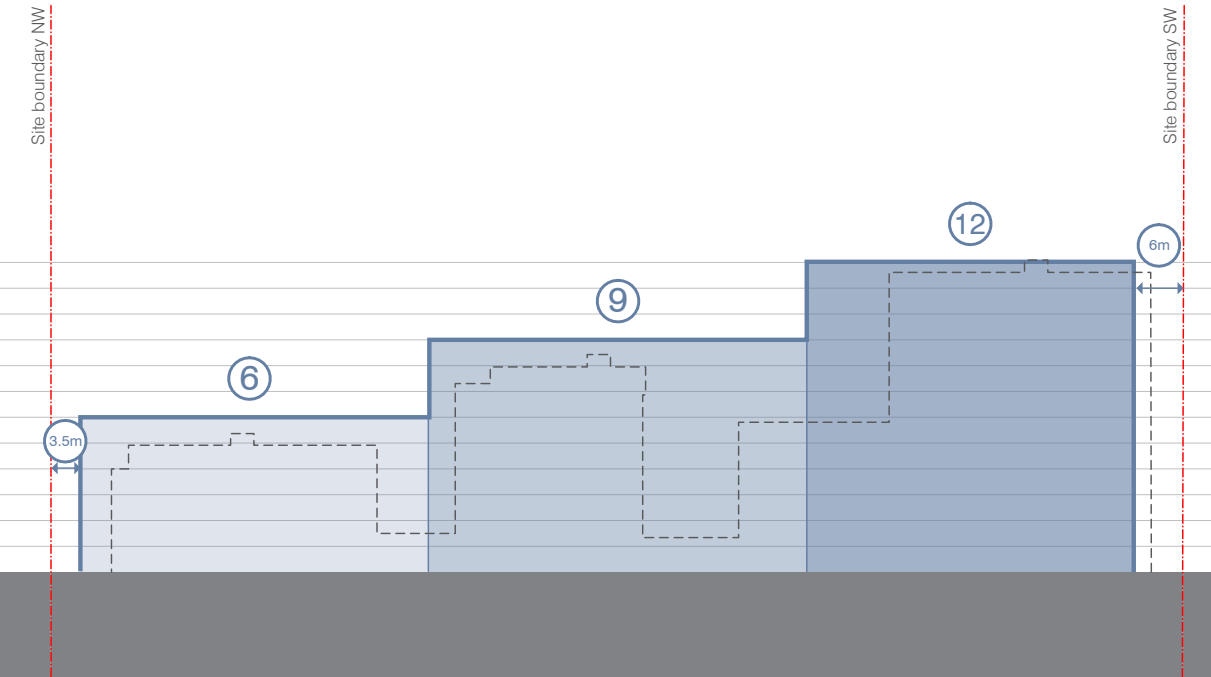
- 3m setback from western site boundary
- 2m setback from eastern site boundary
- 3.5m setback from northern site boundary (allowing habitable rooms at the northern facade as the lot north of the subject site is non-residential)
- 6m setback from southern site boundary (allowing non-habitable rooms on the southern facade as the lot south of the subject site is residential)

A summary of the approved Concept Plan and proposed modification is provided below.

| Current Approval | | Proposed |
|----------------------|----------------------|---|
| Max Height (storeys) | 5 - 12 storeys | 6 -12 storeys |
| Max Height (m) | 38 m | 38m |
| FSR | 3.52:1 | 3.52:1 |
| GFA | 13,149 square metres | 13,149 square metres |
| Residential GFA | 12,459 square metres | 13,149 square metres |
| Commercial GFA | 619 square metres | - |
| Retail GFA | 71 square metres | - |
| Dwellings | 138 apartments | 138 apartments – 147 apartments |
| Parking | 105 spaces | To be determined at the DA stage, with regard to the Ryde DCP |



Site plan including building envelope.
Legend
- - Site boundary
- - Concept Plan Approval
- Proposed building area



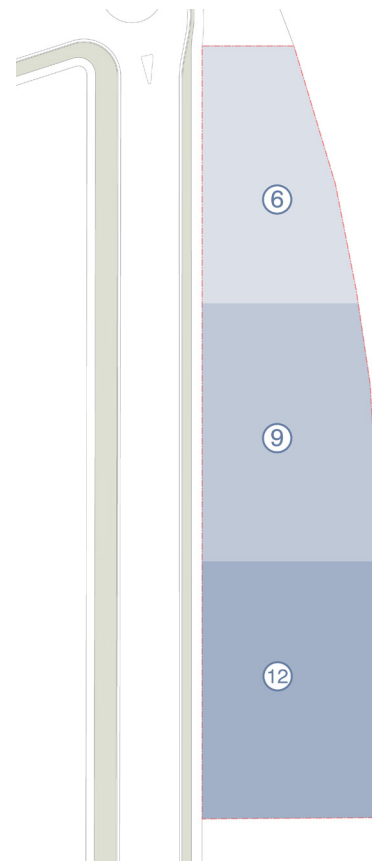
West Parade elevation including building envelope
Legend
- - Site boundary
- - Concept Plan Approval
- Proposed building envelope

Design controls

To ensure the highest quality development, and to support the proposed Concept Plan modification, design controls have been developed to inform the future built form and development outcomes on the site.

The design controls provide additional guidance on matters such as height, massing, setbacks, residential entries, communal open space, and street frontage.

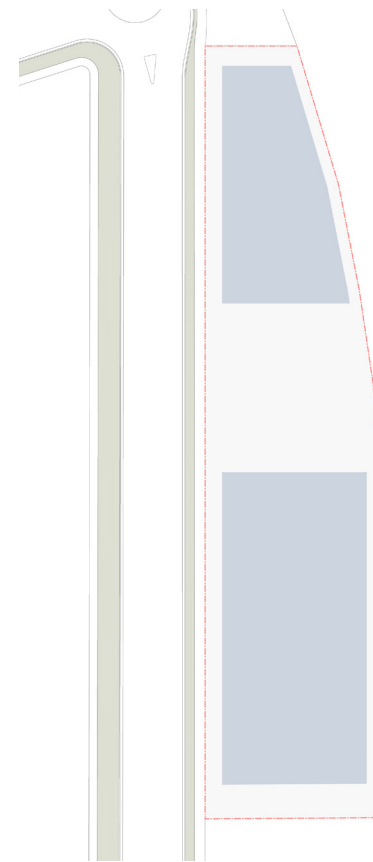
It is intended that the design controls would be addressed in future project specific development applications for the site.



Height

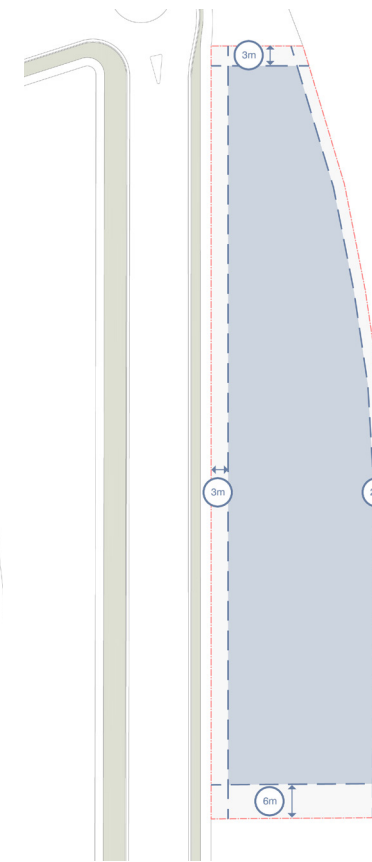
Three height limits of 6, 9, and 12 storeys (increasing in height towards the south) provide a response to local urban context while also locating the majority of residents closer to West Ryde Station and local amenities.

A maximum podium height of 6 storeys applies to across the whole site to ensure that the built form is compatible with, and transitions to the existing built form in the vicinity.



Massing

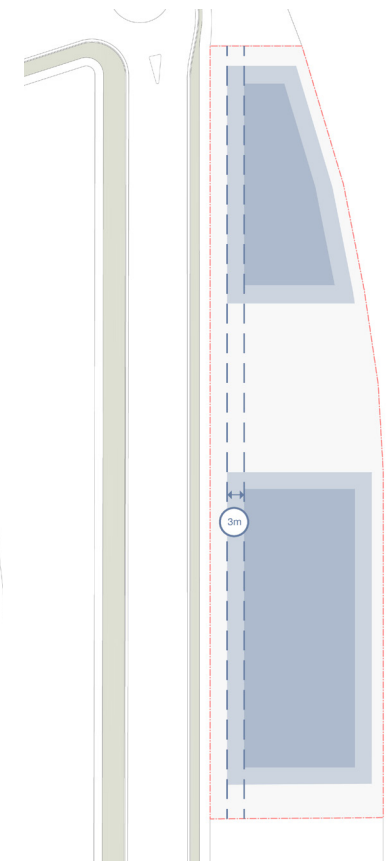
Built form must be broken into a minimum of two blocks in order to minimise visual bulk of continuous street walls, and to offer views through the site between blocks.



Ground Level Setbacks

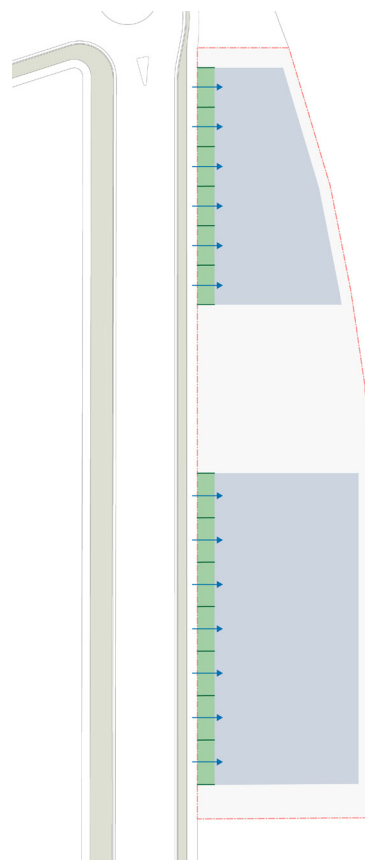
Minimum setbacks to each boundary address streetscape and building separation requirements.

The recommended minimum setbacks are of 3m to West Parade, 6m to the southern boundary, 2m to the railway (eastern) boundary, and 3m to the northern boundary.



Upper Level Setbacks

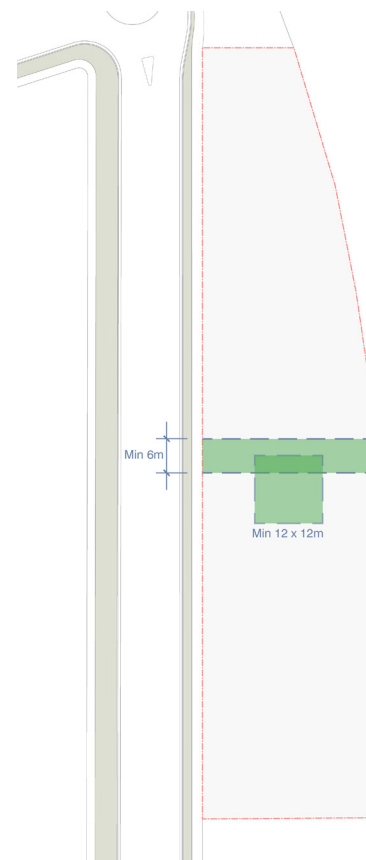
Above the maximum podium height of 6 storeys, an additional setback of 3m from the podium frontage reduces the bulk and scale of upper levels from the street.



Frequently-Spaced Pedestrian Entrances

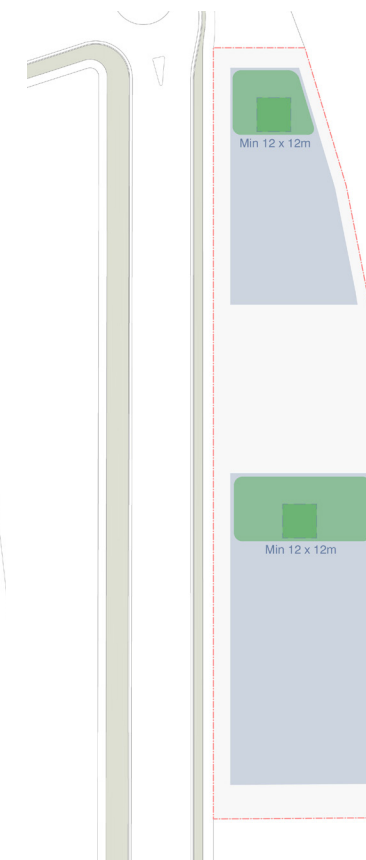
All ground floor dwellings and residential lobbies are to have separate pedestrian access from the street, in order to provide an active, fine-grain residential frontage that complements the character of the street.

The number and width of vehicle entries is to be minimised facilitate continuity of the active street frontage.



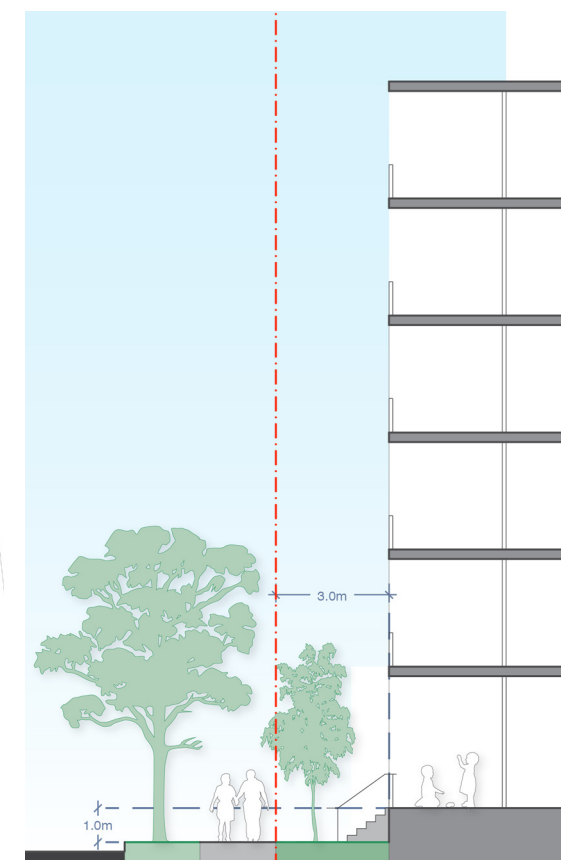
Ground Level Communal Open Space

A minimum of 30% of landscaped communal open space must be provided at ground level in a central location on the site, between two of the building blocks. A minimum width of 6m should extend from the western to the eastern boundary to provide visual continuity through the site, while a minimum 12 x 12m area provides functional space for social and recreation activities. These minimum areas may overlap, and should provide a deep soil zone substantial enough for at least one existing or new large tree.



Upper Level Communal Open Space

Communal open spaces provided on podium or upper level rooftops have a minimum dimension of 6 x 6m to provide functional gathering space, should maximise opportunities for solar access, and should include soft landscaping.



Active Street Frontage

The 3m setback to West Parade is to be allocated as front garden spaces for ground floor dwellings, incorporating individual gates for pedestrian access into the building. The ground floor should be elevated above the footpath level by 1m to facilitate visual privacy of residences. Accessible dwellings are exempted from this level change requirement, and may be either level with the footpath, or provide an entry ramp in perpendicular orientation to the footpath to negotiate a level change under 1m.

Conclusion

This application seeks to modify the Concept Plan Approval to;

- Introduce a mix of social and affordable housing that is consistent with *Future Directions for Social Housing in NSW*
- Remove the proposed commercial and retail uses
- Amend the proposal to achieve compliance with the ADG
- Extend the approval for a period of two years from June 2018.

The Concept Plan Approval was issued under the previous Part 3A of the Environmental Planning and Assessment Act 1979 on 18 June 2010. On 15 June 2015 approval was extended via a modification under section 75W to 15 June 2018.

The current approval allows development up a maximum height of 38.1m, with 13,149sqm of GFA, equivalent to an FSR of 3.52:1. The proposed modification does not seek to alter the maximum building height, or approved GFA.

The modification seeks to improve design outcomes, by ensuring future development can comply with current design standards in the ADG, revising the building area to enable a site responsive design approach, and introducing design objectives and design controls that will guide future development.

Importantly, the modification will bring the development in line with current Government policy in relation to social housing. The proposal will provide for more integrated approach to social housing, aiming to deliver a 70:30 split of private and social housing on the site.



Appendix A

Reference design