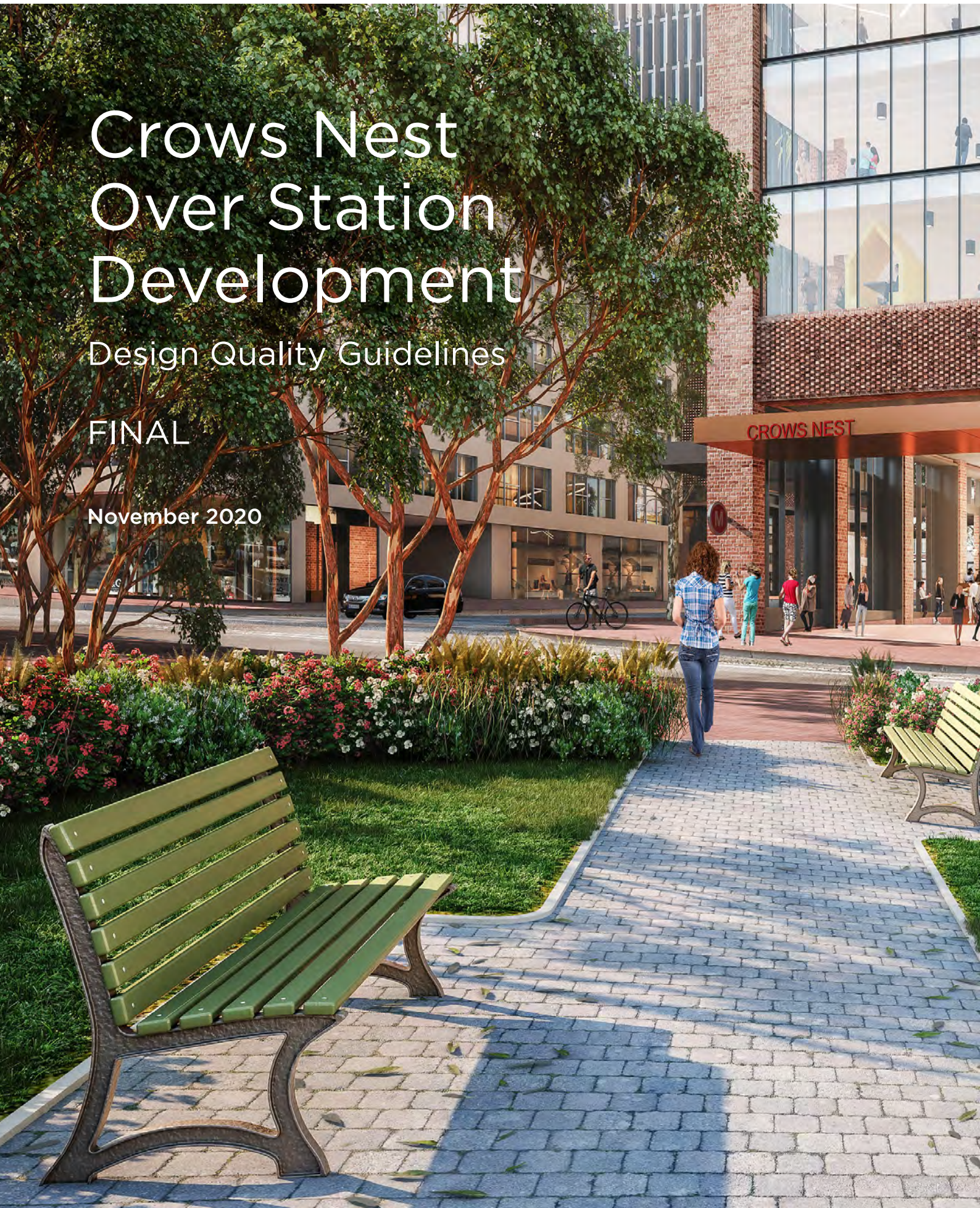


Crows Nest Over Station Development

Design Quality Guidelines

FINAL

November 2020





Purpose of the Document

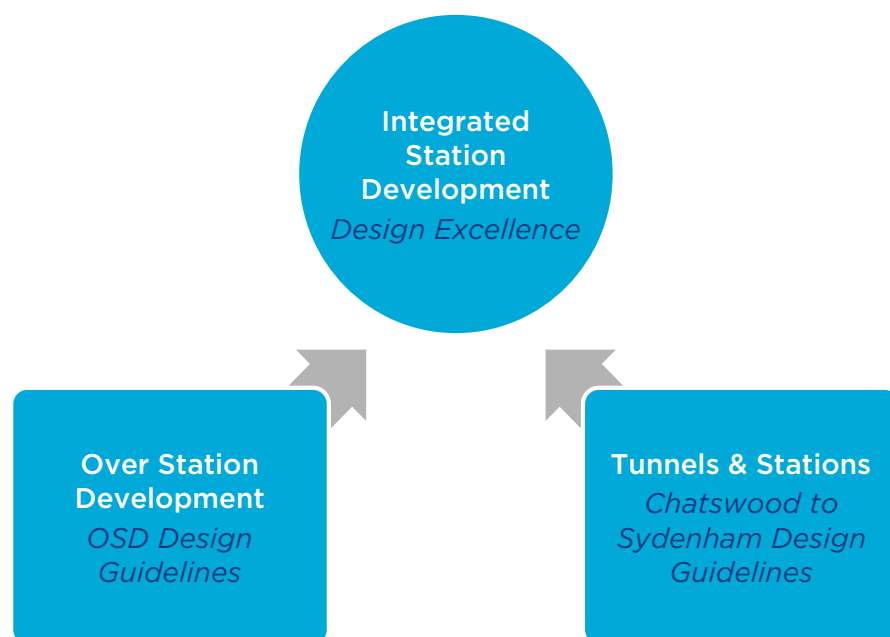
The purpose of this document is to guide the design of the Sydney Metro Crows Nest over station development (OSD) and provide a reference document for the assessment of design outcomes.

Design parameters are included for built form, integration with the public domain and Sydney Metro station, movement, connectivity and legacy outcomes of the development. These have been prepared with reference to:

1. Concept State Significant Development Application Built Form and Urban Design Report for Crows Nest Over Station Development, July 2020.
2. 'Sydney Metro City & Southwest: Chatswood to Sydenham Design Guidelines' (Sydney Metro CSW Design Guidelines), June 2017.
3. 'Sydney Metro City & Southwest Crows Nest Over Station Development: 'Statement of Heritage Impact'', November 2018.
4. Crows Nest Station Draft Preliminary Design - October 2017.
5. Design excellence provisions in Clause 6.19B of the North Sydney LEP 2013.

Together with the Sydney Metro CSW Design Guidelines, these guidelines provide a consistent framework for design across the integrated station development and should be considered in conjunction with the Sydney Metro Design Excellence Strategy (demonstrated below).

These Guidelines establish a benchmark for design quality and have been developed to achieve Design Excellence and deliver the highest standard of architectural, urban and landscape design.



Vision

The Crows Nest OSD will mark a vibrant new gateway to the Crows Nest village centre and reinforce the established St Leonards strategic centre. The built form will be exceptional and distinctive, recognising the urban setting and significance of a major station node as well as complimenting the emerging scale of the St Leonards commercial area.

The OSD will establish a western anchor to the Crows Nest centre, with the design pursuing distinctive outcomes for each development site to deliver a cohesive, legible and integrated end product. The OSD will reflect and enhance the local character and support the existing urban activities of the surrounding precinct.

The development provides an opportunity for an activated podium in the separation between the station podium and the towers. This activated podium space encourages a mix of uses that will provide amenity, convenience and enjoyment for commuters, visitors and community.

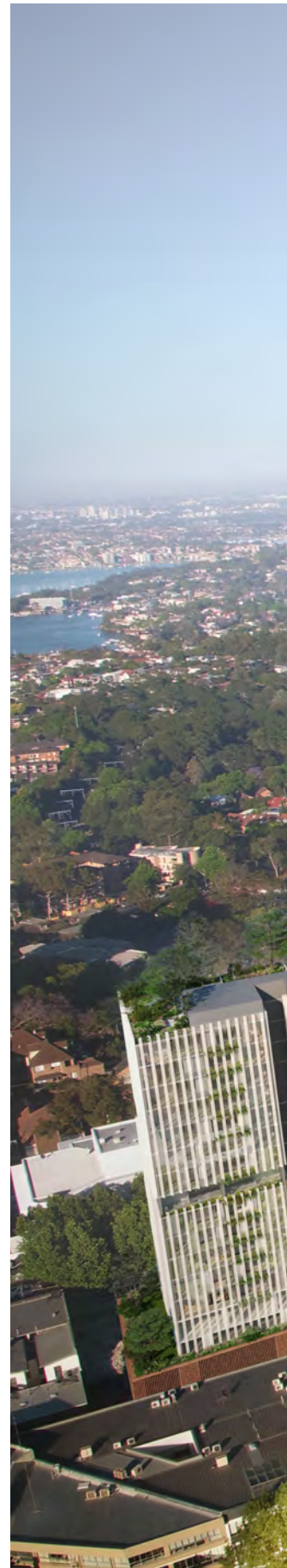




Figure 1 – Artists impression of Crows Nest Station (indicative)

Site Overview



Figure 2 – Site Map

The OSD is bound by the Pacific Highway, Clarke Lane, Clarke Street, Oxley Street, and Hume Street and has a potential maximum gross floor area (GFA) of approximately 56,400 square metres. The development comprises of three separate sites as shown in Figure 3. These are:

- Site A: Block bound by the Pacific Highway, Hume Street, Oxley Street and Clarke Lane (3,879m²);
- Site B: Southern corner of Hume Street, the Pacific Highway and Clarke Lane (1,872m²); and
- Site C: North-western corner of Hume Street and Clarke Street (608m²).

Site Overview



Figure 3 - Development sites

Site Context

Significant features of the site and its context include:

1. The Pacific Highway, a sub-arterial thoroughfare that acts as an important connection to North Sydney and the Sydney CBD.
2. A local character defined by mixed commercial, retail and residential development with five storey buildings along the Pacific Highway and emerging high-rise developments north towards St Leonards.
3. Willoughby Road to the east, a thriving, fine grain high street.
4. Integrating with Hume Street Park, introducing new shared zones, supporting active transport and facilitating movement to St Leonards.
5. Heritage items adjacent to the site, including the brutalist style St Leonards Centre and fine grain architecture of the Higgins Building on the Pacific Highway.
6. Positive activation of the public domain for extensive retail and business operations.
7. Pedestrian movements between on street parking, existing public transport infrastructure and surrounding retail uses.
8. A variety of opportunities to enhance the public domain and the broader urban context through improved and activated streets, contextual and human scale design, integrated landscaping and quality finishes.
9. A local streetscape characterised by buildings built to the street, continuous awnings, wide footpaths with outdoor dining areas and irregular planting of trees and shrubs.

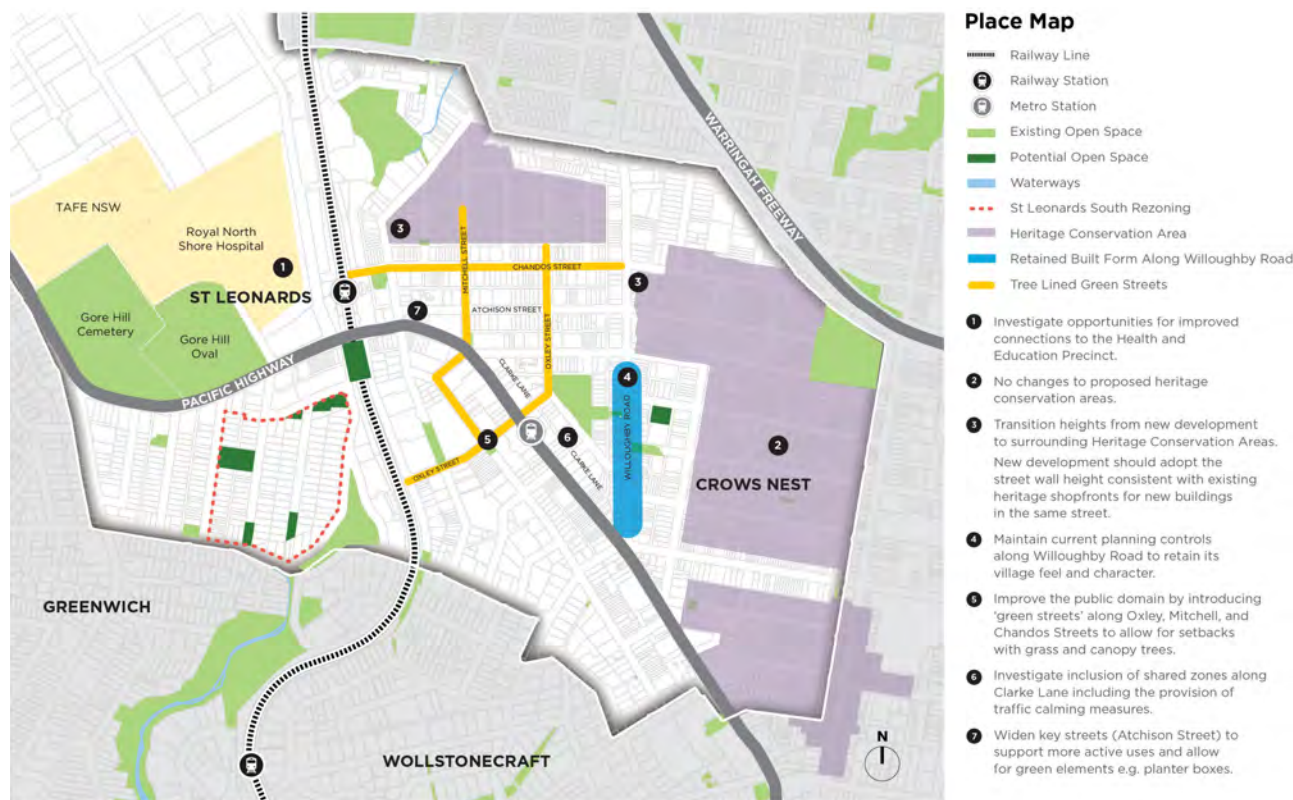


Figure 4 – Site Context

Sydney Metro Design Objectives

The design outcomes for the Crows Nest OSD are underpinned by the design objectives for all Sydney Metro projects.

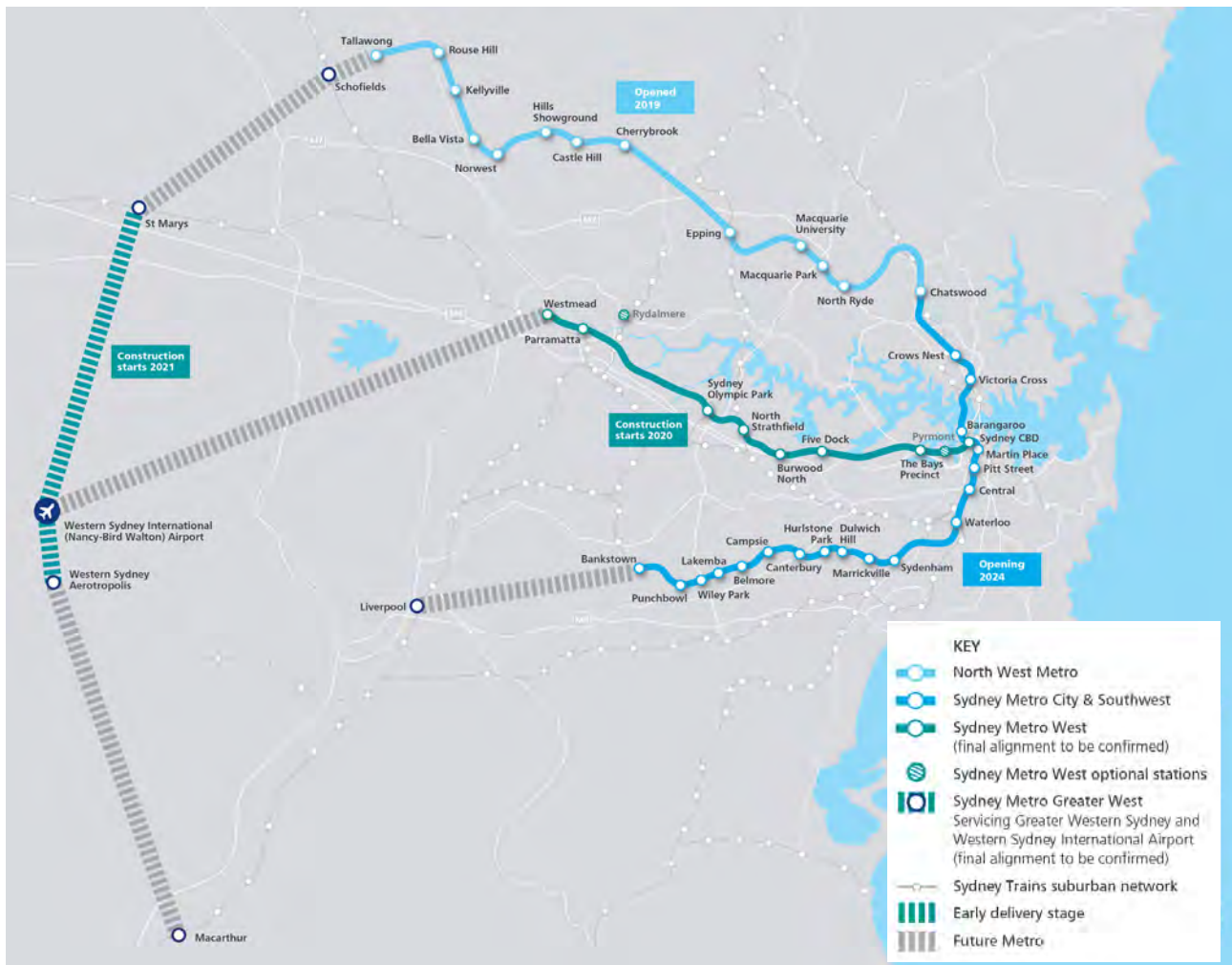


Figure 5 – Sydney Metro Network

Designs for the station, station precinct and the OSD must deliver on the following:

Ensuring an easy customer experience.

Sydney Metro places the customer first. Stations are welcoming and intuitive with simple, uncluttered spaces that ensure a comfortable, enjoyable and safe experience for a diverse range of customers.

Being part of a fully integrated transport system.

Sydney Metro is a transit-oriented project that prioritises clear and legible connections with other public and active transport modes within the wider metropolitan travel network that intersect with this new spine.

Being a catalyst for positive change.

Sydney Metro is a landmark opportunity to regenerate and invigorate the city with new stations and associated development that engage with their precincts, raise the urban quality and enhance the overall experience of the city.

Being responsive to distinct contexts and communities.

Sydney Metro's identity is stronger for the unique conditions of centres and communities through which it passes. This local character is to be embraced through internationally benchmarked high quality station architecture and public domain that is well integrated with the valuable inherited urban fabric of existing places.

Delivering an enduring and sustainable legacy for Sydney.

Sydney Metro is a positive legacy for future generations. A high standard of design across the corridor, stations and station precincts, that sets a new benchmark, is vital to ensuring the longevity of the Metro system, its enduring contribution to civic life and an ability to adapt to a changing city over time.

Sydney Metro City And Southwest Chatswood To Sydenham Design Guidelines

The Chatswood to Sydenham (C2S) design guidelines form part of the environmental impact statement (EIS) for the C2S Critical State Significant Infrastructure approval and establish design standards to guide the interface outcomes between stations and their surrounding locality.

The C2S design guidelines provide the following key design drivers and urban design strategies for Crows Nest station. As a component of the approved C2S EIS, these drivers and strategies must inform the design response for the Crows Nest OSD.

Key design drivers

1. Create a new transport focus on the southern side of the St Leonards strategic centre.
2. Maximise legibility and connectivity with the local urban structure.
3. Integrate the station with local improvement plans and make a positive contribution to the sense of place.

Urban design strategies

Green Streets

Crows Nest Station is an opportunity to enhance the amenity and green character of Oxley Street and Hume Street. This could include enhanced pedestrian space, paving upgrades and street trees.

Visible and integrated entries

There is an opportunity to create a seamless entry experience into the station through materiality and extending the character of the surrounding public domain into the station.

A Pacific Highway landmark

The station and associated development above has the opportunity to create a consistent built edge along the Pacific Highway, aligned with existing buildings and maximising activation at ground level. The over station development will explore varied heights and a stepped form to create transition between the taller towers of St. Leonards and village scale of Crows Nest.

Supporting the vision for Crows Nest Village

The Sydney Metro entry on the corner of Hume and Clarke Streets directly addresses cycle, kiss and ride and taxi access including improved pedestrian crossing of Clarke Street.

This station entry will be scaled to reflect the local fine grained character of the area and accommodate new and existing active transport links.

Through a variety of uses and ground plane activation, the development will also create opportunities for engagement with the general public.

St Leonards and Crows Nest 2036 Plan

On 29 August 2020 the Department of Planning, Industry and Environment (DPIE) finalised the planning package for St Leonards and Crows Nest. This included the approval of the Crows Nest Sydney Metro rezoning to amend the planning controls in the North Sydney Local Environmental Plan 2013 that apply to the OSD sites.

DPIE's vision states that:

Sitting at the heart of the Eastern Economic Corridor; connectivity, innovation and a commitment to great design will see the St Leonards and Crows Nest area transform as a jobs powerhouse. Mixing commercial and residential, the centre will offer workers, residents, students and visitors a variety of homes, jobs and activities with increased accessibility with a new world class metro service.

The Crows Nest OSD delivers on the vision of the 2036 Plan as summarised below:

An employment hub

Protect and strengthen the area's commercial role with additional commercial and complementary uses to capitalise on renewed confidence in the commercial market as well as retail, creative, health and education sectors.

Transit-oriented development

Create future employment opportunities that leverage the increased transport capacity of the new Metro station.

Vibrant community

Encourage improvements to the public domain to create a new community focal point in this accessible location. Provide active frontages and connectivity to contribute and enhance the village atmosphere of Crows Nest.

Accessible places

Ensure the Sydney Metro sites are an attractive and easy place to visit, with improved pedestrian and cyclist connections. Enable increased setbacks and landscaped areas to contribute to the landscape character.

A well-designed place

Ensure new buildings demonstrate the highest quality design that respects and enhances the diverse local character of the area. This includes consideration of scale, character and any impacts to the amenity of the existing surrounding developments.

Infrastructure

Support the delivery of state infrastructure to ensure growth and enhance the amenity of the precinct.

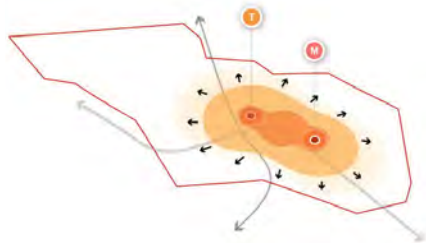
Amenity

Ensure new development does not cause unacceptable overshadowing to any key existing or proposed public open spaces.

DPIE's vision is aligned with Sydney Metro's vision for Crows Nest.

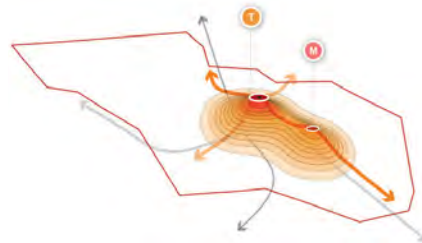
2036 Plan Urban design guidelines

Proximity to Stations – Epicentre



Density is located close to a transport hub such as St Leonards Station or the Crows Nest Metro Station. Taller buildings are to be located within 150-200m of either station and transition in height to the surrounding areas

Centre and Height Transition – Height ‘Knuckle Area’



St Leonards is to be read as the predominant centre to reinforce its commercial role and Crows Nest as a secondary lifestyle destination. Large developments are to be located between the stations and transition in height, bulk and scale from the highway to the surrounding neighbourhood areas. The focus of height is referred to as the ‘knuckle area’ within St Leonards mixed use commercial core.

Maintain Willoughby Road



Willoughby Road is an important place within the Plan area that is to be protected. New development is to ensure minimal overshadowing and avoid unreasonable visual impact to the public domain.

Reduce Impact on Heritage Conservation Areas



Heritage Conservation Areas are to be protected. New development nearby is to ensure minimal overshadowing and avoid unreasonable visual impact to the public domain or private open spaces of dwellings within these areas.

Expand Open Space Network and Protect Amenity



Investigate opportunities to provide additional open space in the Plan area. New developments are not to cause unacceptable overshadowing to any key existing or proposed public open spaces.

Response to Character Area



New development must respond appropriately to built form character of sub-precincts, including height, bulk and scale, as well as the existing and proposed uses.

Transition between Character Areas



The interface between two-character areas should respond to the adjacent character area to create an appropriate transition.

Fine Grain Approach



New development should consider its relationship to surrounding context and urban grain, while seeking to provide improved accessibility through appropriate frontage treatment and provision of arcades, laneways, and enhanced public domain.

Source: NSW Department of Planning, Industry and Environment

Design Guidelines

Built Form

Respond to the existing urban fabric and future built form context, with landmark buildings creating a focal point on the ridgeline. Design excellence clearly delineates podium and tower elements, with relief offered through varied heights and a stepped form, appropriately scaled intermediary¹ space and extensive use of landscaping and greenery to create a vertical village setting. Consider design options that will facilitate a mix of land uses to meet the needs of a diverse group of users.

Innovative use of scale and articulation will bring unique responses to each development site. Responses will create a consistent built edge along the Pacific Highway while achieving increased permeability, connectivity, maximum activation at ground level and seamless entries to the station.



Figure 6 – Artist's impression of Clarke Street entry from Hume Street Park

¹Open space between and under towers at podium level.

Podium and Street Wall

Podium form and articulation references buildings in the immediate context and clearly delineates podium functions from activities above. The street wall should deliver activation, permeability, a sense of human scale and heritage sensitivity.

This is to be achieved through:

1. Responding to the surrounding streetscape scale, with direct reference to the local context.
2. Minimising bulk and scale through horizontal and vertical articulation and choice of materials.
3. Innovation in delivering distinct podium and OSD components while respecting design outcomes at St Leonards.
4. Extensive use of landscaping and green elements at street level and top-of-podium levels.
5. Appropriate street setbacks that allow for managed customer and pedestrian flow and comfort.
6. Maximising site permeability and connectivity with through site links.
7. Respecting surrounding historical cues and materiality, including traditional shopfront facades and the St Leonards Centre.
8. Relating car park heights to the scale of the St Leonards Centre and designing for future adaptation.
9. Addressing pedestrian level wind environments at ground level.
10. Strong activation of street frontages, station entries and lobbies including integration of Clarke Lane, where appropriate.

Built Form above the Podium

Provide a built form above the podium that achieves design excellence, visual interest and responds to the evolving height, scale and character of the area. The design will establish a Sydney Metro landmark, respond to the civic nature of Hume Street Park and Willoughby Road while acknowledging its presence on the Pacific Highway.

This is to be achieved through:

1. An innovative, high quality and articulated design that successfully breaks up the mass of the buildings by exploring varied heights and stepped forms to create transition between the scales of St Leonards and Crows Nest.
2. Providing high quality amenities and opportunities for inter-floor connections throughout the building to provide relief to the overall composition.
3. A building design that responds to the surrounding public domain elements and heritage buildings.
4. Exploring design efficiencies to improve building form and deliver a reduced footprint.
5. Exploring opportunities to incorporate 'vertical gardens' into the design to create soft edges to the building form.
6. Providing an appropriately scaled intermediary¹ space that creates relief and delineation between podium and tower.
7. Building heights that contribute to a varied skyline.
8. Use of high quality materials that reflect the function of the OSD, provide a simple design resolution within the skyline and a low reflectivity coefficient.
9. Solar access should be maintained for the following:
 - a) Willoughby Road between 11:30am and 2:30pm (mid-winter, 21 June)
 - b) Earnest Place between 10am and 3pm (mid-winter, 21 June)
10. Enabling winter sun to penetrate the primary public spaces at ground level including minimising overshadowing on key public open spaces such as Hume Street Park and Ernest Place.
11. Maximising daylight penetration to improve amenity of OSD sites.
12. Maintaining views from and solar access to other residential strata sites in close proximity where possible.
13. Pursuing opportunities to provide active uses within the built form thereby creating a destination.
14. Works within rooftop services zone to minimise and/or reduce visual prominence and overshadowing.

¹Open space between and under towers at podium level.

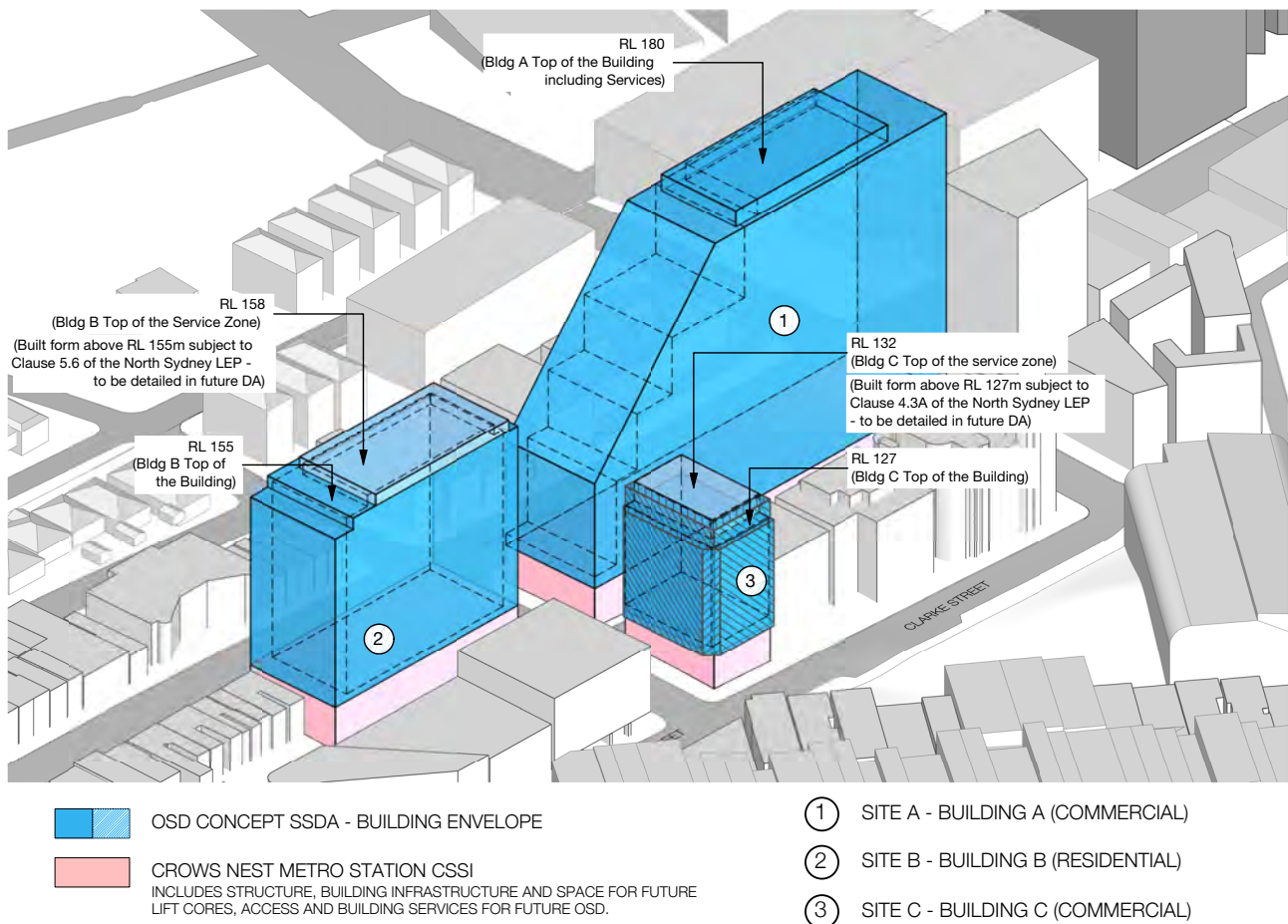


Figure 7 - Building envelopes above the podium

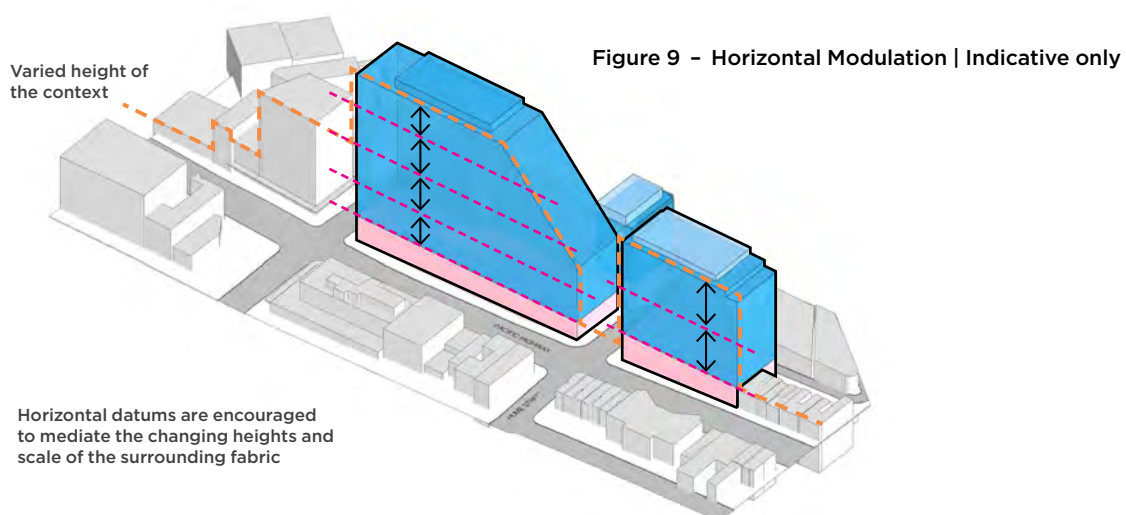
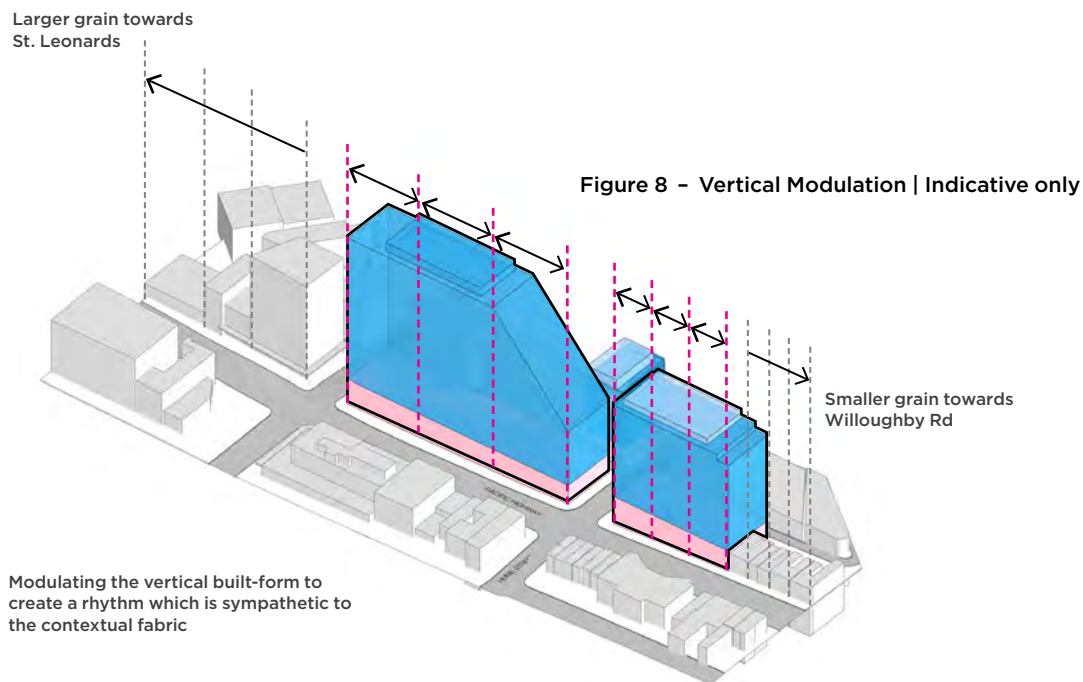
Building Articulation

The facades of the buildings should be articulated with architectural treatments, pillars, window frames and vertical landscape features. These areas along the facades should also accommodate wind mitigation measures, facade treatments, vertical articulation, solar controls and the like.

Horizontal + Vertical Modulation

Horizontal and vertical facade modulation should take into consideration and demonstrate a response to the scale and character of the surrounding urban fabric. In particular the proposal should;

1. Consider the contextual grid of surrounding buildings and incorporate appropriate modulation and relief in length to avoid monotonous expression.
2. Consider breaking the height of the building by introducing vertical modulation and relief where appropriate within the envelope and facade.



Facade + Building Articulation

Demonstrate consideration of articulation in both the facade and the envelope taking into consideration the following recommendations;

1. Potential for recesses and protrusions which create dynamic and engaging visual interests
2. A minimum of 15% of the building envelope is recommended to be used for architectural articulation
3. A maximum floor plate depth of 27.5m
4. A maximum floor plate area of 2750m² (GFA)
5. Any articulation which is proposed beyond the defined building envelope should be supported by detailed solar and architectural analysis and agreed during the design excellence process.

Activation Towards Hume St.

1. A high level of activation is encouraged along Hume St developing and strengthening the connection towards Willoughby Rd. Opportunities for vertical gardens and roof level activation especially facing towards Hume St is encouraged.

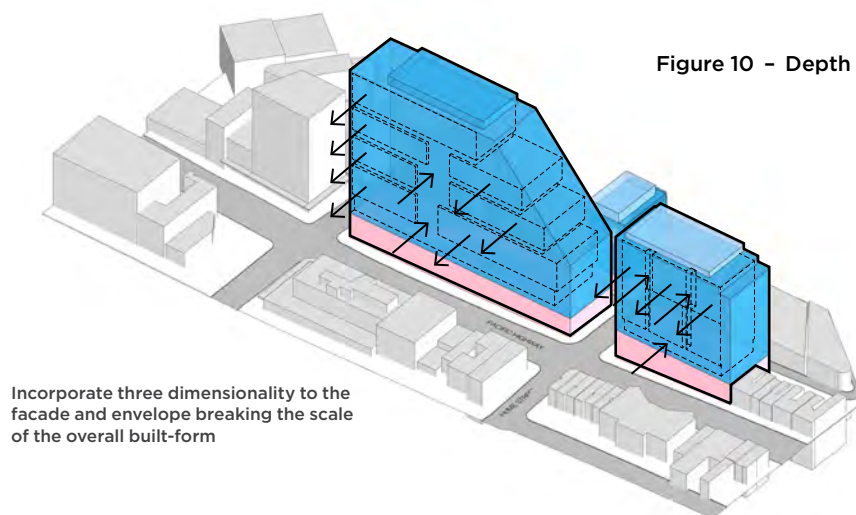


Figure 10 - Depth & Relief | Indicative only

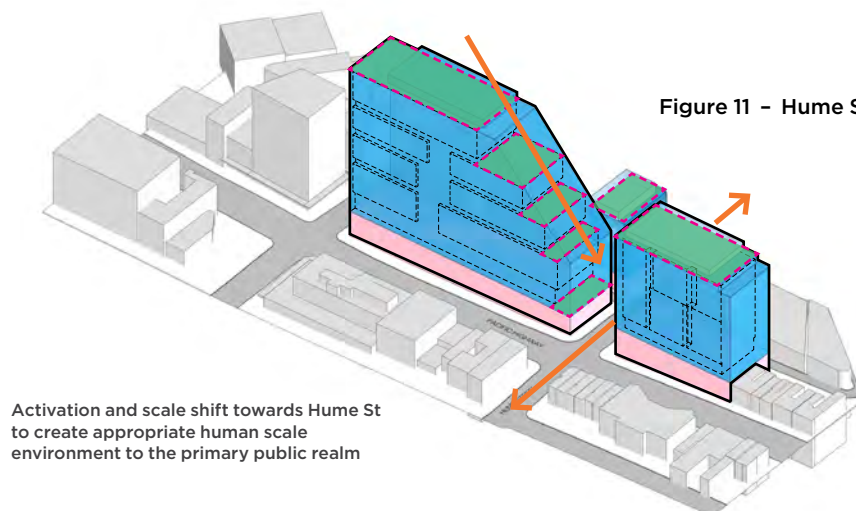


Figure 11 - Hume St Activation | Indicative only

Public Domain and Place

Contribute to a well-considered, activated public and connected domain that integrates with adjoining retail and commercial precincts, enhancing adjacent existing public spaces and acknowledging the constraints along the Pacific Highway. Facilitate a diverse mix of uses that will contribute to an active public domain.

This is to be achieved through:

1. Activating the streetscape through active and passive public domain outcomes and incorporating extensive areas of landscaping and green spaces.
2. Extending the ground plane (visually and materially) into the station entries.
3. Creating destination opportunities to engage the public with the development on a day-to-day basis.
4. Doorways and facade lines offering open, welcoming and barrier free customer access around station entries.
5. High quality, flexible streetscapes and urban plazas that expand and contract, accommodating both peak commuter flows and general everyday use, including:
 - a) Strongly activated, pedestrian oriented public domain.
 - b) Enhancing the amenity and green character of Oxley Street and Hume Street by the inclusion of landscape elements.
 - c) Integration with proposed through site links to Willoughby Road and the expansion of Hume Street Park.
6. Building signage should respond to the station design and context.
 - a) Signage to be integrated into the architectural design of the building where possible.
 - b) Signage zone locations will need to carefully consider the location and visual impacts. Signage zones include, entry wall signs in building lobbies, fascia awning signs, building identification signs, wayfinding signs and sky signs.
 - c) Be flush against the building facade.
 - d) Be of a scale, proportion and form appropriate to its context and the building.
 - e) If illuminated, not cause unacceptable glare or create any other adverse safety or amenity impacts.
7. Using appropriate materials and finishes that allow for integration of extensive natural landscaping and respond to local heritage, geography and civic character.



Figure 12 – Artist's impression of Hume Street activation

Movement and Connectivity



Figure 13 – Artist's impression of Clarke Street entry from Hume Street Park

Integrate the development's role as an entry point into the precinct, prioritising pedestrian access, permeability and amenity within the development and across the precinct. Facilitate legible, safe and convenient interchange opportunities across transport modes.

This is to be achieved through:

1. Managing pedestrian flow at ground level through seamless Metro entries and OSD lobbies.
2. Prioritising pedestrian access to facilitate future pedestrian desire lines to the St Leonards commercial centre, Crows Nest village and the revitalised Hume Street Park .
3. Provision of legible, safe and convenient interchange opportunities, including:
 - a) Clear and legible access to bus stops on the Pacific Highway and Willoughby Road.
 - b) Facilitating easy access to taxi ranks and kiss-and-ride areas along Clarke Street.
4. Acknowledging the important north - south connection of the Pacific Highway.
5. Integrating with North Sydney Council's Crows Nest Placemaking and Principles Study.
6. Provision of the following supporting transport infrastructure:
 - a) Bicycle parking facilities.
 - b) A separated on-road cycle connection on Hume Street, between Clarke Street and Nicholson Street.
 - c) Signalised crossing on the north-western leg of the Pacific Highway/Oxley Street intersection.
 - d) Widened crossings on Oxley Street and Hume Street at the intersections with the Pacific Highway.
7. Use of existing and new street trees to reduce the heat island effect and supplement existing planting.

Integration and Legacy

Provide an OSD that seamlessly integrates all components of the development and is a positive legacy for future generations.

This will be achieved through:

1. Delivering a high standard of design and finish to promote longevity and adaptability over time.
2. Functional integration of the various permissible uses with the Sydney Metro station that is seamless, simplifying the vertical division and coordination of services wherever possible.
 - a) Permissible uses should be functionally separated as much as possible at ground level to assist in pedestrian circulation and serviceability.
 - b) Back-of-house operations and services should be consolidated wherever possible while maintaining any required separation between the OSD and Sydney Metro.
 - c) Consider and allow for flexible future use of functional spaces and services coordination.
3. Delivering an over-station development that:
 - a) Does not have any adverse impact on the design and/or operation of the Sydney Metro Station
- b) Is capable of complete demolition and reconstruction, or major maintenance or modification, without significant interference to the operation of the Sydney Metro Station.
- c) Will allow independent access, servicing and maintenance from normal station activities and operation.
- d) Integrates efficiently with the station structure.
- e) Achieves unity in design through connecting the station entry, podium and built form above the podium, as a single readable piece of architecture including continuity in the façade design and alignment with established horizontal building alignments at lower levels.
- f) Provides visual connectivity between OSD lobbies and the public domain.
4. Provide a sustainable and resilient development that positively contributes to community health and wellbeing and addresses the principles of ecologically sustainable design. Include design measures to improve energy efficiency, water efficiency, reduce waste, any adverse impacts from climate change.

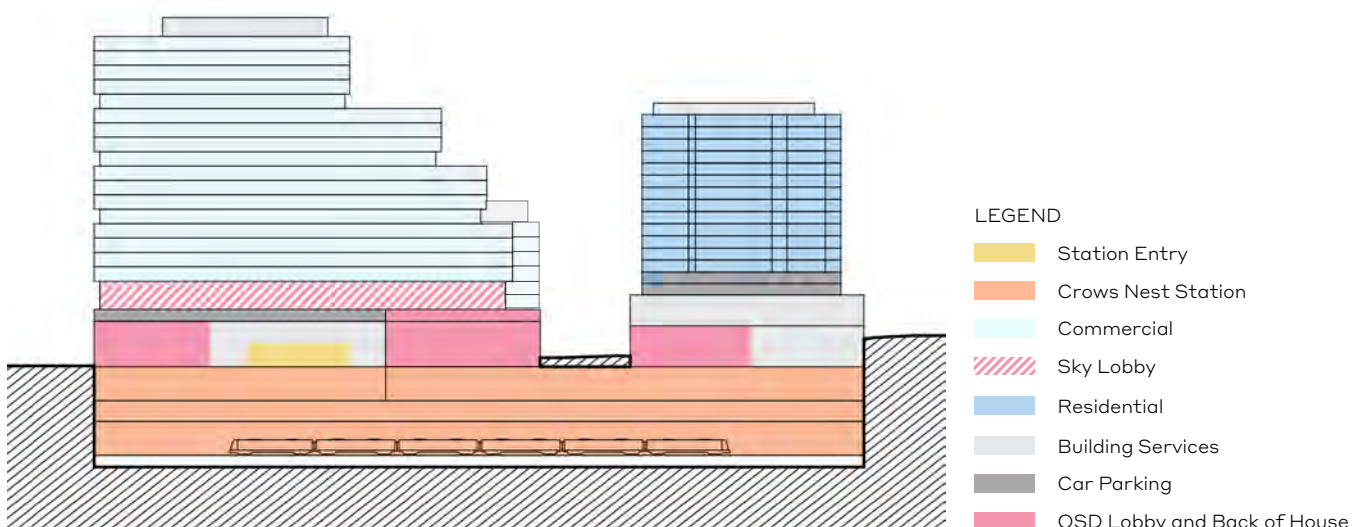


Figure 14 - Proposed uses of sites A and B

Benchmarks

Sydney Metro has identified benchmark projects that demonstrate the design quality aspirations for the Crows Nest integrated station development site.

These benchmarks have been selected to showcase the minimum quality expected in relation to:

1. Integrated design outcomes.
2. Built form above the podium that showcases high quality design and contributes positively to the skyline.
3. Architecture that responds to existing and future built context, and improves the existing public domain, streetscape character and scale.
4. A design that provides high quality public spaces and is integrated, active, safe and comfortable for customers and pedestrians.
5. A design that fulfils the needs of a civic station entry and high quality OSD entries with well integrated associated servicing.
6. Materials and finishes that are high quality and appropriate to the context.
7. Integration of high quality public art and public domain elements that contribute to a positive experience of the place for users and the general public.
8. Well considered built form, planning, façade design and services integration that contribute towards best practice sustainable outcomes

Each benchmark has been chosen to endorse a variety of design outcomes as outlined in the table below. Further details of these projects are provided in the Sydney Metro Design Excellence Strategy and are to be used to guide design outcomes for the OSD.

Benchmark	One Central Park	Aurora Place	Duo Central Park	Lumiere'	One 30 Hyde Park	Nishi Building	Quest at Sydney Olympic Park	Upper House	Intern'l House Sydney
Integrated design	✓	✓	✓	✓	✓	✓		✓	
High quality built form	✓	✓	✓	✓	✓	✓			✓
Responds to streetscape/scale	✓	✓	✓	✓	✓	✓			✓
High quality public space	✓	✓	✓			✓	✓		✓
Civic station entry and high quality OSD entry						✓	✓	✓	
Materials and finishes	✓	✓	✓	✓	✓	✓		✓	✓
Public art and public domain elements	✓	✓	✓			✓		✓	
Facade and service integration	✓	✓	✓		✓	✓	✓	✓	✓

Contact us

For more information visit our website sydneymetro.info or contact us via:

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