

STRATEGIC LAND USE ANALYSIS

APPENDIX K





Sydney Metro City & Southwest

Pitt Street North Over Station

Development:

Strategic Land Use Analysis

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| Applicable to: | Sydney Metro City & Southwest |
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Executive Summary

This report has been prepared as part of a concept State Significant Development Application (concept SSD Application) 8875 to the Minister for Planning pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), as part of the response to the Secretary's Environmental Assessment Requirements (SEARs) provided for the project on 30 November 2017.

Specifically, this report provides a detailed analysis of the strategic merits of various land uses at the site, in order to determine the most appropriate use of land in the context of the Pitt Street Station northern portal. Given that the site comprises the full southern portion of the block bounded by Pitt Street, Park Street and Castlereagh Street, there is a prime opportunity to use the site to provide a memorable, amenable and high quality Over Station Development (OSD) form above the station portal. Noting this, the following land uses have been specifically contemplated as part of this analysis:

- Commercial office
- Visitor accommodation
- Retail
- Residential
- Student accommodation

An option in which one or more of the above uses have been provided together (i.e. a mixed use option) has also been contemplated as part of this analysis. Similarly, a 'do nothing' scenario has also been analysed as part of this assessment. All options contemplated include a station component at the ground floor.

The analysis undertaken against each of these has been tested against a set of key criteria:

- appropriateness of the development within the locational context of the site
- adequacy of ground floor space for entry and lobby facilities
- adequacy of car parking and loading provision
- adequacy of vertical lifting
- floor plate and size each land use
- impact on adjacent properties and the public domain
- ability for the development to take advantage of the opportunities afforded by Sydney Metro

From these, it is demonstrated that the site is best suited for residential, visitor accommodation and commercial uses. A mixed use scheme has therefore been proposed which reflects the most suitable uses identified through this assessment.

1. Purpose

1.1. Background

This report supports a concept State Significant Development Application (concept SSD Application) submitted to the Department of Planning and Environment (DPE) pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The concept SSD Application is made under section 4.22 of the EP&A Act.

Sydney Metro is seeking to secure concept approval for a mixed use tower above the northern portal of Pitt Street Station, otherwise known as the over station development (OSD). The concept SSD Application seeks consent for a building envelope and its use for residential accommodation, visitor accommodation and commercial premises, maximum gross floor area (GFA), pedestrian and vehicular access, circulation arrangements and associated car parking as well as the strategies and design parameters for the future detailed design of development.

Sydney Metro proposes to construct the OSD as part of an integrated station development package, which would result in the combined delivery of the station, OSD and public domain improvements. The station and public domain elements form part of a separate planning approval for Critical State Significant Infrastructure (CSSI) approved by the Minister for Planning on 9 January 2017.

As the development is within a rail corridor, is associated with railway infrastructure and is for the purposes of residential or commercial premises with a Capital Investment Value of more than \$30 million, the project is State Significant Development (SSD) pursuant to Schedule 1, clause 19(2)(a) of the *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP). The full extent of the proposed development is also State Significant Development by virtue of clause 8(2) of the SRD SEPP.

This report has been prepared to respond to the Secretary's Environmental Assessment Requirements (SEARs) issued for the concept SSD Application for Pitt Street North on 30th November 2017 which state that the Environmental Impact Statement (EIS) is to address the following requirement:

Land Use

1.2. Overview of the Sydney Metro

The New South Wales (NSW) Government is implementing *Sydney's Rail Future*, a plan to transform and modernise Sydney's rail network so that it can grow with the city's population and meet the needs of customers in the future (Transport for NSW, 2012). Sydney Metro is a new standalone rail network identified in *Sydney's Rail Future*.

Sydney Metro is Australia's biggest public transport project, consisting of Sydney Metro Northwest, which is scheduled for completion in 2019 and Sydney Metro City & Southwest, which is scheduled for completion in 2024.

Sydney Metro West is expected to be operational in the late 2020s. (Refer to **Figure 1**).



Figure 1: Sydney Metro alignment map

Sydney Metro City & Southwest includes the construction and operation of a new metro rail line from Chatswood, under Sydney Harbour through Sydney’s CBD to Sydenham and on to Bankstown through the conversion of the existing line to metro standards.

The project also involves the delivery of seven new metro stations, including at Pitt Street. Once completed, Sydney Metro will have the ultimate capacity for 30 trains an hour (one every two minutes) through the CBD in each direction - a level of service never seen before in Sydney.

On 9 January 2017, the Minister for Planning approved the Sydney Metro City & Southwest - Chatswood to Sydenham application as a Critical State Significant Infrastructure project (reference SSI 15_7400), hereafter referred to as the CSSI Approval.

The CSSI Approval includes all physical work required to construct the CSSI, including the demolition of existing buildings and structures on each site. Importantly, the CSSI Approval also includes provision for the construction of below and above-ground structures and other components of the future ISD (including building infrastructure and space for future lift cores, plant rooms, access, parking and building services, as relevant to each site). The rationale for this delivery approach, as identified within the CSSI Application, is to enable the ISD to be more efficiently built and appropriately integrated into the metro station structure.

The EIS for the Chatswood to Sydenham component of the Sydney Metro City & Southwest project identified that the OSD would be subject to a separate assessment process.

Since the CSSI Approval was issued, Sydney Metro has lodged four modification applications to amend the CSSI Approval as outlined below:

- Modification 1 – Victoria Cross and Artarmon Substation which involves relocation of the Victoria Cross northern services building from 194-196A Miller Street to 50 McLaren Street together with inclusion of a new station entrance at this location referred to as Victoria Cross North. 52 McLaren Street would also be used to support construction of these works. The modification also involves the relocation of the substation at Artarmon from Butchers Lane to 98 – 104 Reserve Road. This modification application was approved on 18 October 2017.
- Modification 2 – Central Walk which involves additional works at Central Railway Station including construction of a new eastern concourse, a new eastern entry, and upgrades to suburban platforms. This modification application was approved on 21 December 2017.
- Modification 3 – Martin Place Station which involves changes to the Sydney Metro Martin Place Station to align with the Unsolicited Proposal by Macquarie Group Limited (Macquarie) for the development of the station precinct. The proposed modification involves a larger reconfigured station layout, provision of a new unpaid concourse link and retention of the existing MLC pedestrian link and works to connect into the Sydney Metro Martin Place Station. It is noted that if the Macquarie proposal does not proceed, the modification (if approved) would be surrendered. This modification application was approved on 22 March 2018.
- Modification 4 – Sydenham Station and Sydney Metro Trains Facility South which incorporated Sydenham Station and precinct works, the Sydney Metro Trains Facility South, works to Sydney Water's Sydenham Pit and Drainage Pumping Station and ancillary infrastructure and track and signalling works into the approved project. This modification application was approved on 13 December 2017.

Given the modifications, the CSSI Approval is now approved to operate to Sydenham Station and also includes the upgrade of Sydenham Station.

The remainder of the City & Southwest project (Sydenham to Bankstown) proposes the conversion of the existing heavy rail line and the upgrade of the existing railway stations along this alignment to metro standards. This portion of the project, referred to as the Sydenham to Bankstown Upgrade, is the subject of a separate CSSI Application (No. SSI 17_8256) for which an Environmental Impact Statement was exhibited between September and November 2017 and a Response to Submissions and Preferred Infrastructure Report was submitted to the NSW Department of Planning & Environment (DPE) in June 2018 for further exhibition and assessment.

1.3. Planning relationship between Pitt Street Station and the OSD

While the northern portal of Pitt Street Station and the OSD will form an Integrated Station Development, the planning pathways defined under the *Environmental Planning and Assessment Act 1979* requires separate approval for each component of the development. In this regard, the approved station works (CSSI Approval) are subject to the provisions of Part 5.1 of the EP&A Act (now referred to as Division 5.2) and the OSD component is subject to the provisions of Part 4 of the EP&A Act.

For clarity, the approved station works under the CSSI Approval included the construction of below and above ground structures necessary for delivering the station and also enabling construction of the integrated OSD. This included but is not limited to:

- demolition of existing development
- excavation
- station structure including concourse and platforms
- lobbies
- public domain improvements
- station portal link (between the northern and southern portals of Pitt Street Station)
- access arrangements including vertical transport such as escalators and lifts
- structural and service elements and the relevant space provisioning necessary for constructing OSD, such as columns and beams, space for lift cores, plant rooms, access, parking, retail and building services.

The vertical extent of the approved station works above ground level is defined by the 'transfer slab' level (which for Pitt Street North is defined by RL 48.00), above which would sit the OSD. This delineation is illustrated in **Figure 2** below.

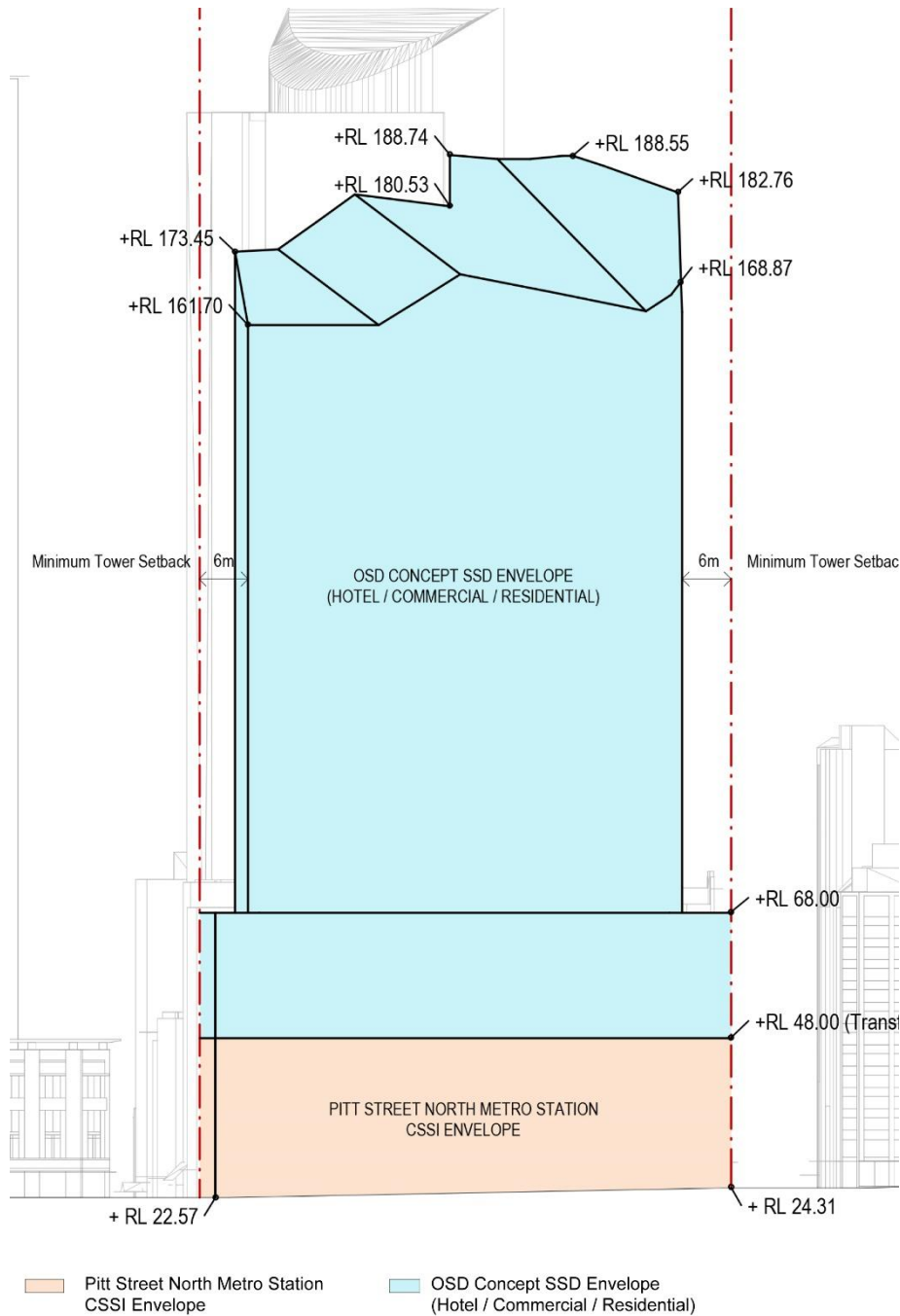


Figure 2: Delineation between station and OSD

The CSSI Approval also establishes the general concept for the ground plane of Pitt Street Station including access strategies for commuters, pedestrians and workers. In this regard, pedestrian access to the station would be from Park Street and the OSD lobbies would be accessed from Pitt Street, Park Street and Castlereagh Street.

Since the issue of the CSSI Approval, Sydney Metro has undertaken sufficient design work to determine the space planning and general layout for the station and identification of those spaces within the station area that would be available for the OSD. In addition, design work has been undertaken to determine the technical requirements for the structural integration of

the OSD with the station. This level of design work has informed the concept proposal for the OSD. It is noted that ongoing design development of the works to be delivered under the CSSI Approval would continue with a view to developing an Interchange Access Plan (IAP) and Station Design Precinct Plan (SDPP) for Pitt Street Station to satisfy Conditions E92 and E101 of the CSSI Approval.

The public domain improvement works around the site would be delivered as part of the CSSI Approval.

1.4. The Site

The Pitt Street North OSD site is located at the southern portion of the Sydney CBD block bounded by Pitt Street, Park Street and Castlereagh Street, above the northern portal of the future Pitt Street Station (refer to **Figure 3** below).

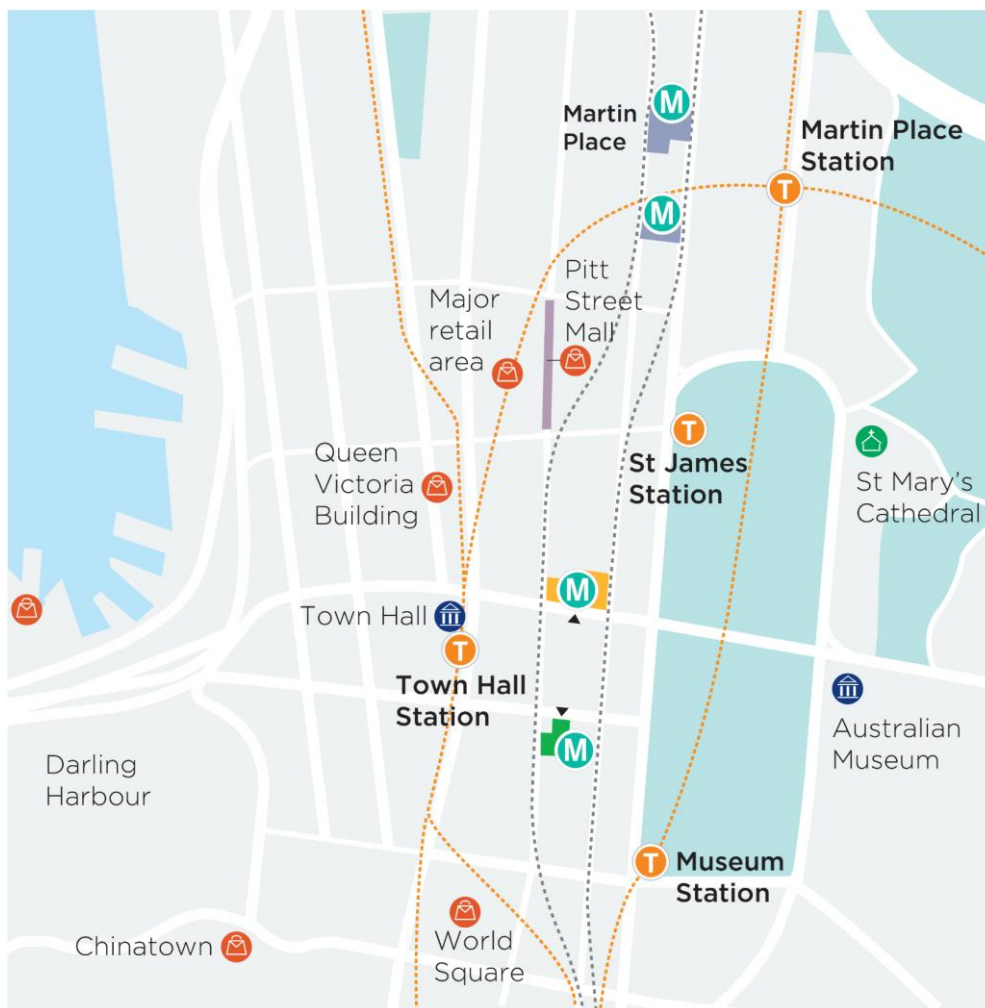


Figure 3: Pitt Street Station location plan

The site is located in the City of Sydney Local Government Area. The site (refer to **Figure 4** below) is irregular in shape, has a total area of approximately 3,150 square metres and has street frontages of approximately 28 metres to Pitt Street, 81 metres to Park Street and 48 metres to Castlereagh Street.

The site address is 175-183 Castlereagh Street, Sydney and comprises the following properties:

- Lot 3 in DP 74952
- Lot 1 in DP 229365
- Lot 2 in DP 900055
- Lot 1 in DP 596474
- Lot 17 in DP 1095869
- Lot 2 in DP 509677
- Lot 1 in DP 982663
- Lot 2 in DP 982663
- Lot 3 in DP 61187
- Lot 1 in DP 74367

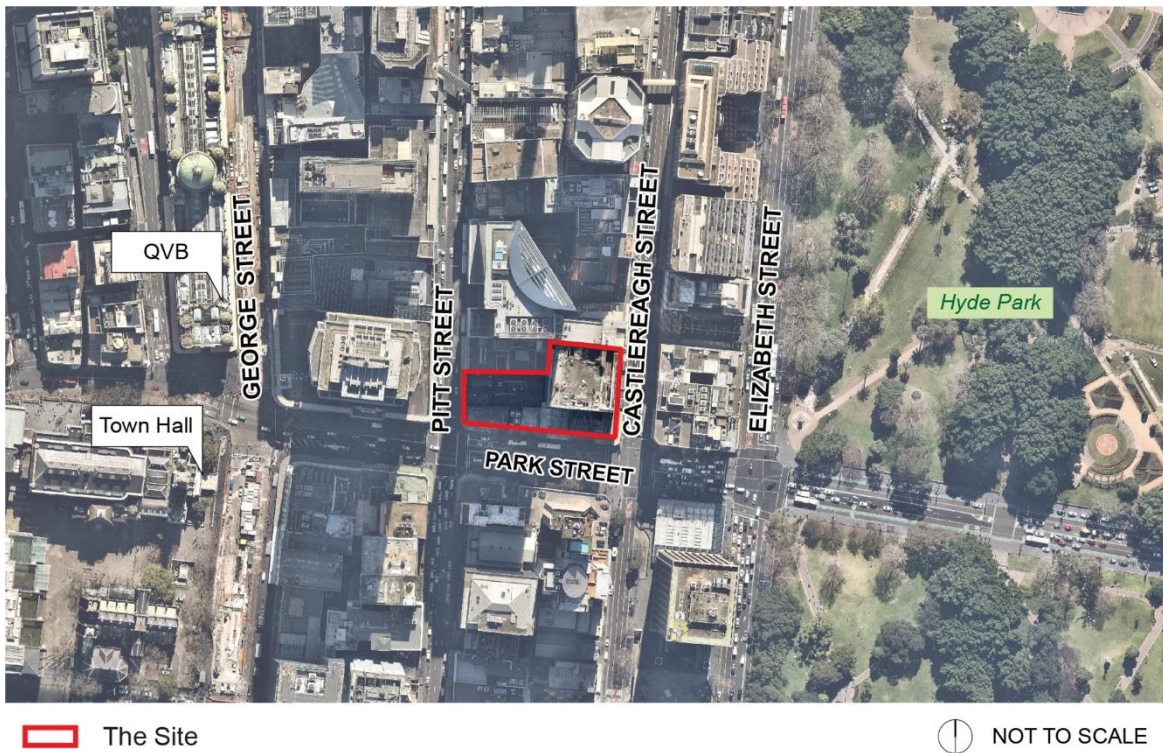


Figure 4: Aerial photo of Pitt Street North

1.5. Overview of the proposed development

The concept SSD Application seeks concept approval in accordance with section 4.22 of the EP&A Act for the OSD above the approved Pitt Street Station (northern portal). This Application establishes the planning framework and strategies to inform the detailed design of the future OSD and specifically seeks planning approval for:

- a building envelope as illustrated at Figure 5
- a maximum building height of approximately Relative Level (RL) 189 which equates to approximately 43 storeys including a podium height of RL68 (approximately 45m), which equates to approximately 12 storeys above ground
- a maximum GFA of 49,120 square metres for the OSD component, which equates to a Floor Space Ratio (FSR) of 15.59:1, resulting in a total maximum GFA at the site (including station floorspace) of 50,309 square metres and a total maximum FSR of 15.97:1, including flexibility to enable a change in the composition of land uses within the maximum FSR sought
- conceptual use of the building envelope for a range of uses including commercial office space, visitor accommodation and residential accommodation
- use of the conceptual OSD space provisioning within the footprint of the CSSI Approval (both above and below ground), including the OSD lobby areas, podium car parking, storage facilities, services and back-of-house facilities
- car parking for approximately 50 spaces located across five levels of the podium
- loading and vehicular access arrangements from Pitt Street
- pedestrian access from Pitt Street, Park Street and Castlereagh Street
- strategies for utilities and service provision
- strategies for the management of stormwater and drainage
- a strategy for the achievement of ecologically sustainable development
- indicative signage zones
- a strategy for public art
- a design excellence framework
- the future subdivision of parts of the OSD footprint (if required)

As this concept SSD Application is a staged development pursuant to section 4.22 of the EP&A Act, future approval would be sought for detailed design and construction of the OSD. A concept indicative design, showing a potential building form outcome at the site, has been provided as part of this concept SSD Application at Appendix E.

Pitt Street Station is to be a key station on the future Sydney Metro network, providing access to the Sydney Central Business District (CBD). The proposal combines the metro station with a significant mixed use tower, contributing to the Sydney skyline. The OSD would assist in strengthening the role of Central Sydney as the key centre of business in Australia and would contribute to the diversity, amenity and sustainability of the CBD.

It is noted that Pitt Street Station southern portal OSD has been subject to a separate application, and does not form part of this concept SSD Application.

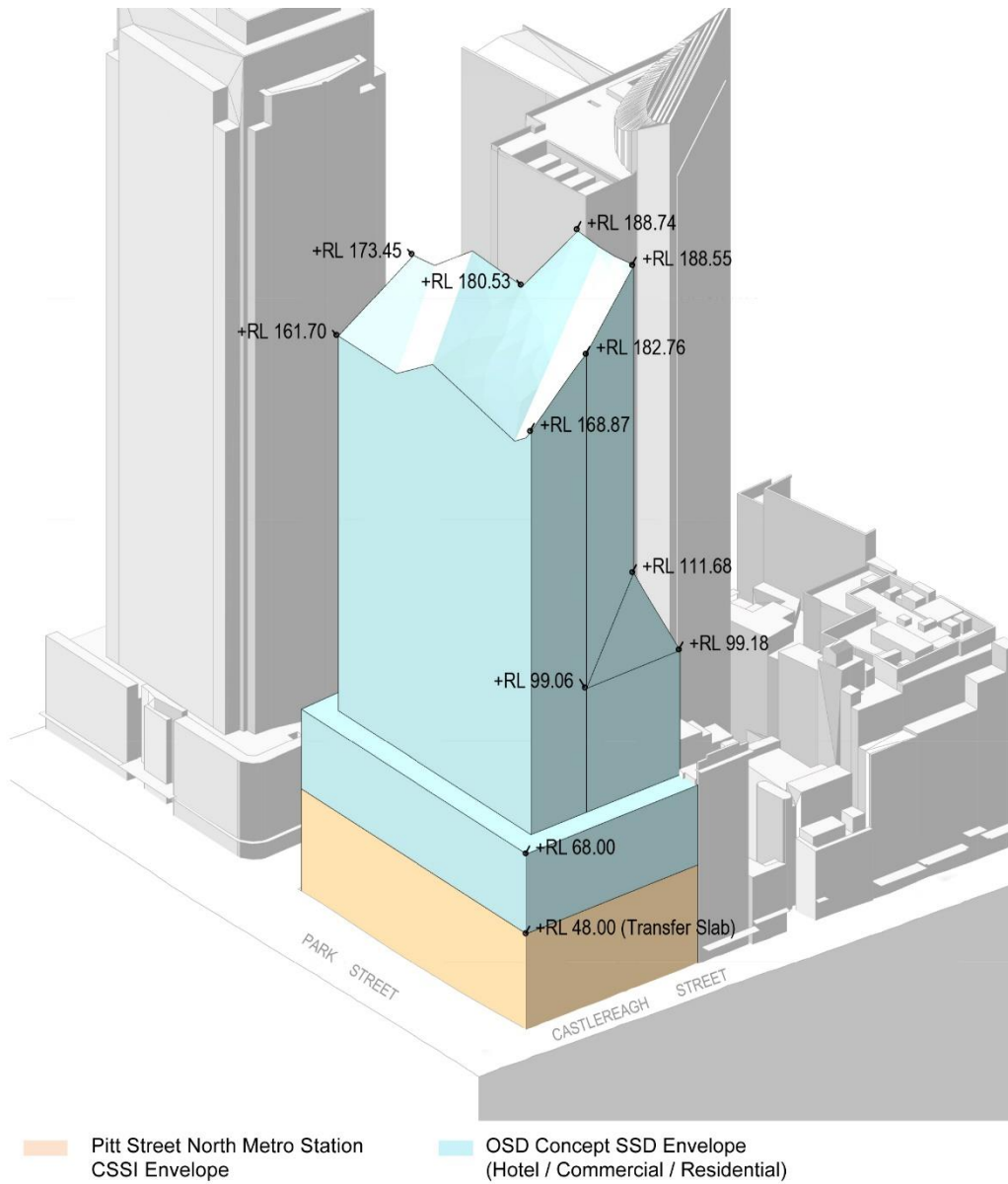


Figure 5: Pitt Street North OSD building, including OSD components (orange) and station box (grey)



Figure 6: Pitt Street North OSD indicative design, as seen from eastern, southern and western elevations

1.6. Staging and framework for managing environmental impacts

Sydney Metro proposes to procure the delivery of the Pitt Street North integrated station development in one single package, which would entail the following works:

- station structure
- station fit-out, including mechanical and electrical
- OSD structure
- OSD fit-out, including mechanical and electrical.

Separate delivery packages are also proposed by Sydney Metro to deliver the excavation of the station boxes/shafts ahead of the ISD delivery package, and line-wide systems (e.g. track, power, ventilation) and operational readiness works prior to the Sydney Metro City & Southwest metro system being able to operate.

Three possible staging scenarios have been identified for delivery of the Integrated Station Development:

1. Scenario 1 – the station and OSD are constructed concurrently by constructing the transfer slab first and then building in both directions. Both the station and OSD would be completed in 2024.
2. Scenario 2 – the station is constructed first and ready for operation in 2024. OSD construction may still be incomplete or soon ready to commence after station

construction is completed. This means that some or all OSD construction is likely to still be underway upon opening of the station in 2024.

3. Scenario 3 – the station is constructed first and ready for operation in 2024. The OSD is built at a later stage, with timing yet to be determined. This creates two distinct construction periods for the station and OSD.

Scenario 1 represents Sydney Metro's preferred option as it would provide for completion of the full integrated station development and therefore the optimum public benefit at the site at the earliest date possible (i.e. on or near 2024 when the station is operational). However, given the delivery of the OSD could be influenced by property market forces, Scenarios 2 or 3 could also occur, where there is a lag between completion of the station component of the ISD (station open and operational), and a subsequent development.

The final staging for the delivery of the OSD would be resolved as part of the detailed SSD Application(s).

For the purposes of providing a high level assessment of the potential environmental impacts associated with construction, the following have been considered:

- impacts directly associated with the OSD, the subject of this SSD Application
- cumulative impacts of the construction of the OSD at the same time as the station works (subject of the CSSI Approval).

Given the integration of the delivery of the Sydney Metro City & Southwest metro station with an OSD development, Sydney Metro proposes the framework detailed in

Figure 7 to manage the design and environmental impacts, consistent with the framework adopted for the CSSI Approval, which includes:

- project design – measures which are inherent in the design of the project to avoid and minimise impacts
- mitigation measures – additional to the project design which are identified through the environmental impact assessment
- construction environmental management framework – details the management processes and documentation for the project
- construction noise and vibration strategy – identifies measures to manage construction noise and vibration
- design guidelines – provides an assurance of end-state quality
- environmental performance outcomes – establishes intended outcomes which would be achieved by the project

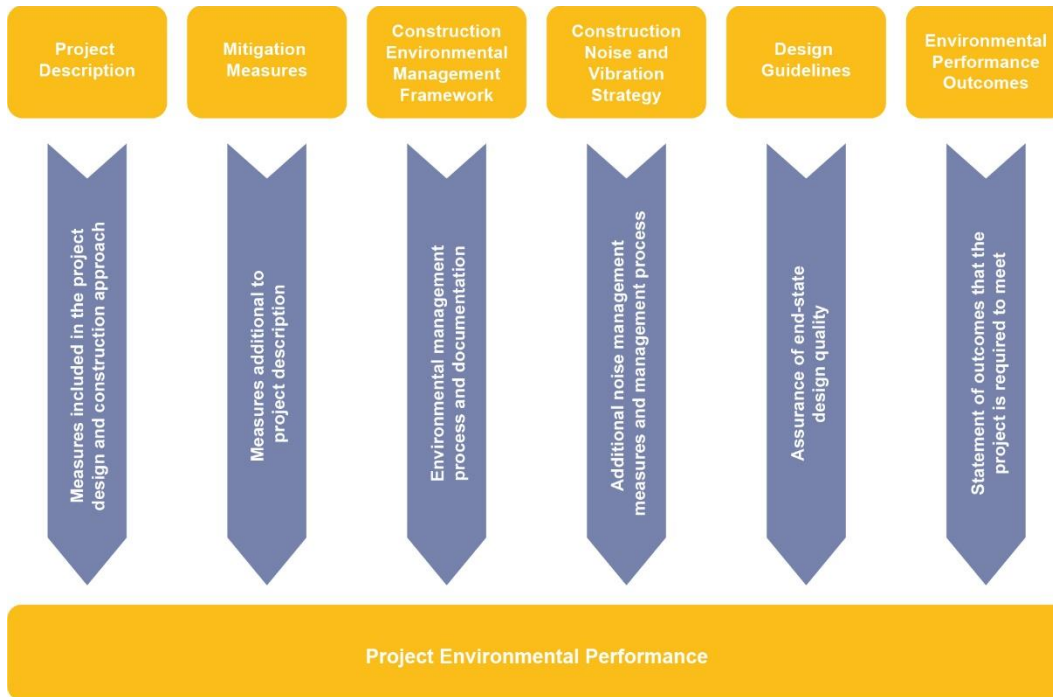


Figure 7: Project approach to environmental mitigation and management

Sydney Metro proposes to implement a similar environmental management framework where the integrated delivery of the CSSI station works and the OSD occur concurrently. This would ensure a consistent approach to management of design interface and construction-related issues.

Sydney Metro proposes this environmental management framework would apply to the OSD until completion of the station and public domain components of the integrated station development delivery contract (i.e. those works under the CSSI Approval). Should the OSD be constructed beyond the practical completion and opening of the section, standard practices for managing construction related environmental impacts would apply in accordance with the relevant guidelines and Conditions of Approval for the detailed SSD Application(s).

2. Site analysis

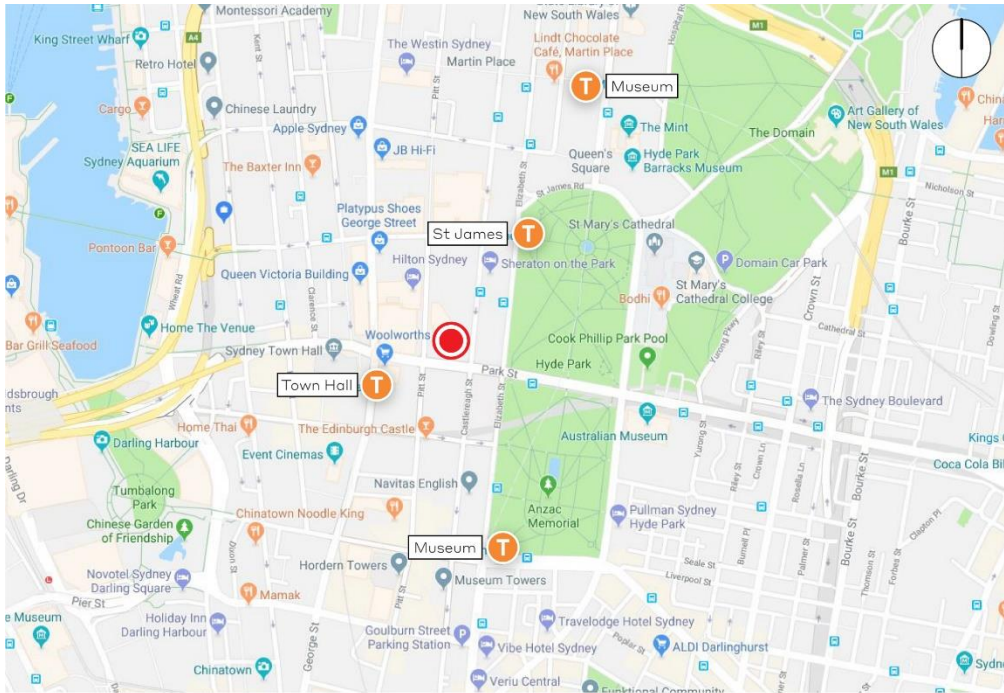
The proposed mixed use OSD concept proposal relates to the Pitt Street North Sydney Metro Station currently under construction. The future Pitt Street North Sydney Metro Station is in the heart of the Sydney Central Business District (CBD) between Town Hall Station and Hyde Park and lies within the Local Government Area (LGA) of the City of Sydney. Specifically, the site has the address of 175-183 Castlereagh Street.

The parcels of land that make up the site are identified at **Table 1** below.

Table 1 - Legal description of site

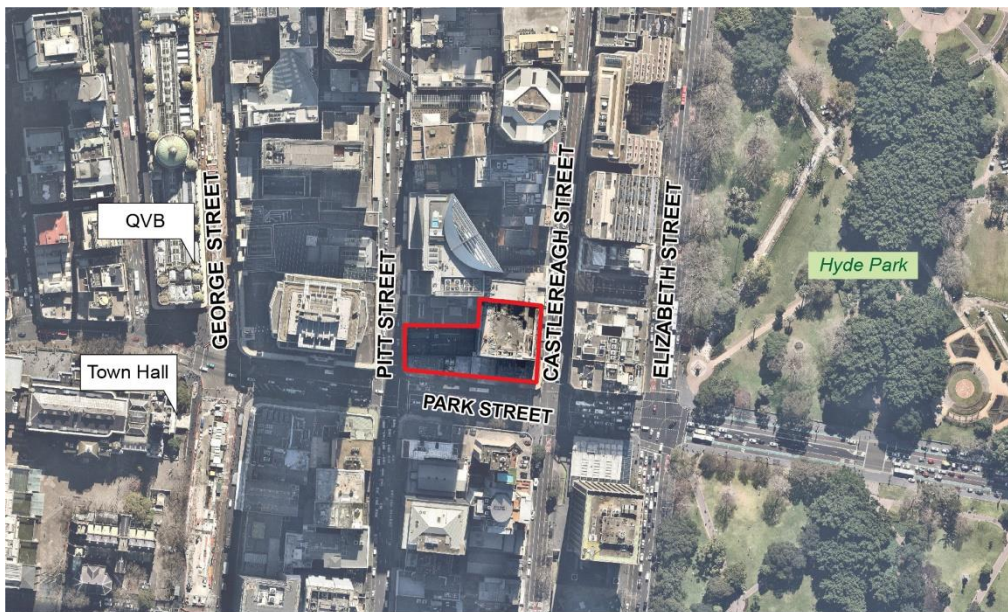
| Address | Lot and DP |
|----------------------------|---------------------|
| 254 Pitt Street | Lot 1 in DP596474 |
| 256 Pitt Street | Lot 17 in DP1095869 |
| 40 Park Street | Lot 2 in DP509677 |
| 42 Park Street | Lot 2 in DP982663 |
| 44 Park Street | Lot 1 in DP982663 |
| 46 Park Street | Lot 3 in DP61187 |
| 48 Park Street | Lot 1 in DP74367 |
| 175-183 Castlereagh Street | Lot 3 in DP74952 |
| | Lot 2 in DP900055 |
| | Lot 1 in DP229365 |

A site context map and aerial map is shown below at **Figure 8** and **Figure 9**.



 The Site

Figure 8: Site context map



 The Site

 NOT TO SCALE

Figure 9: Aerial site view

2.1. Existing Development

The existing site comprises a construction site associated with the underground metro station component of the development which relates to a separate CSSI Approval. Accordingly, all existing buildings have been demolished and secure construction hoarding line the perimeter of the vacant site at each of its frontages.

Prior to the current construction works, the site was occupied by nine fine grained buildings ranging from three to fourteen storeys in height. These buildings generally accommodated retail uses at street level and office uses above.

The existing site conditions are illustrated below at **Figure 10** and **Figure 11**.



Figure 10: Existing development of the site, as viewed from Park Street (to the north east)



Figure 11: Existing development of the site, as viewed from Castlereagh Street (to the north west)

2.2. Site characteristics

The site comprises a consolidated area of 3,150 square metres, which previously comprised of ten fine grain allotments featuring low to medium rise buildings. Demolition of these buildings has since commenced as part of the CSSI Approval, resulting in the site currently presenting as a construction site for the future Metro portal. A full assessment of the existing site conditions has been provided as part of the submitted EIS.

At completion of the station, the site will comprise a key train station component oriented towards Park Street, with OSD uses oriented towards Pitt Street, Park Street and Castlereagh Street. Vehicular access to the site will be shared from Castlereagh Street. The access arrangements to the site have been reproduced at **Figure 12** below.

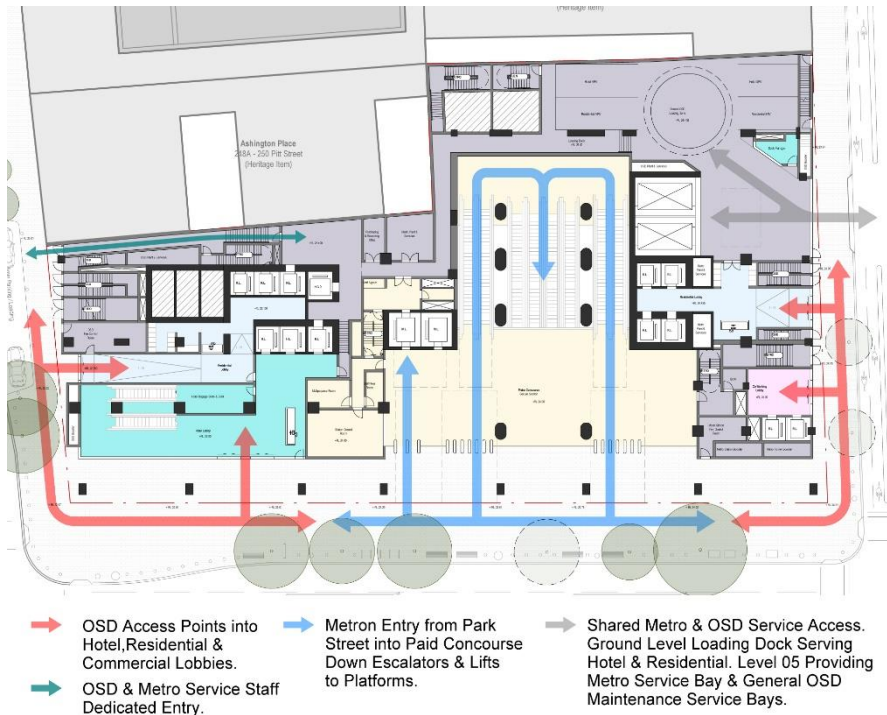


Figure 12: Access arrangements for Pitt Street Station (blue), the OSD (red) and shared vehicular access (grey)

3. The Proposed Development

The proposal relates to an OSD comprising a mixed use residential, hotel and commercial development above the future northern portal of Pitt Street Station.

Specifically, consent is sought for a concept SSD Application for:

- a building envelope
- a maximum building height of approximately Relative Level (RL) 189 which equates to approximately 43 storeys including a podium height of RL68 (approximately 45m), which equates to approximately 12 storeys above ground
- a maximum GFA of 49,120 square metres for the OSD component, which equates to a Floor Space Ratio (FSR) of 15.59:1, resulting in a total maximum GFA at the site (including station floorspace) of 50,309 square metres and a total maximum FSR of 15.97:1, including flexibility to enable a change in the composition of land uses within the maximum FSR sought
- conceptual use of the building envelope for a range of uses including commercial office space, visitor accommodation and residential accommodation
- use of the conceptual OSD space provisioning within the footprint of the CSSI Approval (both above and below ground), including the OSD lobby areas, podium car parking, storage facilities, services and back-of-house facilities
- car parking for approximately 50 spaces located across five levels of the podium
- loading and vehicular access arrangements from Pitt Street
- pedestrian access from Pitt Street, Park Street and Castlereagh Street
- strategies for utilities and service provision
- strategies for the management of stormwater and drainage
- a strategy for the achievement of ecologically sustainable development
- indicative signage zones
- a strategy for public art
- a design excellence framework
- the future subdivision of parts of the OSD footprint (if required)

Section 4.22 of the EP&A Act relates to staged Development Applications. A staged Development Application is one that sets out a Concept proposal for the development of a site, and for which one or more proposals for detailed design are subject to separate Development Applications. On this basis, the Concept Proposal establishes the planning and development framework as the basis for the design of the future development, and it is against this that future detailed applications can be assessed.

The proposed OSD forms part of a Concept SSD Application which seeks approval for a building envelope for the aforementioned uses above the approved Pitt Street North Station portal. As such, it sets out the broad parameters for the redevelopment of the site.

It is important to note that in accordance with the above concept proposal and Section 4.22 of the EP&A Act, no physical works are proposed under this application.

4. Land use assessment approach

4.1. Consideration of appropriate land uses

This strategic land use analysis has included an assessment of a variety of different potential land uses at the site, which comprise of the following:

- residential only
- commercial office only
- retail only
- visitor accommodation only
- student accommodation only
- a mixed use scheme, comprising a combination of two or more of the above uses

4.2. Site opportunities and constraints

In assessing the appropriate land uses for the site, consideration must be given to the opportunities and constraints applicable to the site. Broadly, these have been detailed below:

4.2.1. Site opportunities

- the site is very well connected, providing an excellent opportunity for high density development in conjunction with the future Metro station
- the site is highly visible, which provides a strong opportunity for the provision of a memorable development form which will contribute to the legacy of the Sydney Metro project
- the provision of a substantial developable area, above which there is space for the provision of one or two well-designed towers
- the provision of physical separation to all sides, comprising street frontages to the east, south and west, as well as the provision of undevelopable heritage items to the north
- the strong presence of a 45m street frontage height within close proximity of the development site, providing an opportunity for a similar approach to be undertaken at the site and delivers a substantial podium volume
- the ability to accommodate a high amenity residential building form at the upper levels in relation to solar access
- the provision of substantial ground floor area surplus to station needs, such that the lobby and entrance facilities to support multiple uses can be accommodated

- the location of the site in a context which would enable the provision of a variety of different economic uses, enabling the development to contribute to the wider economy through a number of different uses
- the location of the site in a Central CBD location, enabling for higher intensity uses which take advantage of the surrounding context
- the ability for a tower within the envelope to result in minimal additional overshadowing to nearby public open spaces
- the ability for a future building to accommodate public artwork

4.2.2. **Site constraints**

- the provision of a Metro Station portal at the site, which has significant impacts on any building above including:
 - occupation of large portions of the ground floor plane and subsurface
 - limitations as to the structural configuration of any future development above
 - the inability for the development to include any basement area
 - the occupation of a large portion of the ground floor plane at the site with station services, egress and frontage, resulting in the provision of limited ground floor frontage for OSD uses
 - the limited ability for to locate substantial lift cores for lifts to upper levels of the building from the ground floor
 - the provision of limited shared loading space for vehicles at the ground floor
- the proximity of the site to two Heritage Items, comprising the National Building and the Masonic Club
- the proximity of the site to Hyde Park, resulting in the potential for overshadowing
- the proximity to the Park Regis Apartments, including any potential amenity impacts on privacy, solar access and views
- the limited ability for ground floor vehicular servicing, given the frontage of the site to three major CBD thoroughfares and the delineation of vehicular egress / entrance under the CSSI Approval
- the inability for the provision of any through site link, given the use of the site for the Pitt Street station portal

5. Land use comparison

A key part of this assessment is a relative comparison of the various different potential uses possible at the site. As part of this comparison, a series of key characteristics associated with each considered option has been provided below. It is noted that all options include the provision of the station component beneath.

5.1. Residential only

A residential-only use and form for the OSD would result in the provision of one or two residential towers, which would be designed to be capable of complying with the provision of *State Environmental Planning Policy No. 65 – Design of Residential Flat Buildings* (SEPP 65). This would result in the following general characteristics:

- the provision of an envelope which includes an 8m weighted average setback at all frontages, and a nil setback at the rear
- the orientation of many apartments towards the north-east, where solar access is highest
- storage space for units located within the parking areas in the podium
- less street activation during business hours by comparison to other options, however providing activation both during evenings and weekends outside of standard business hours when activity within the CBD is reduced
- the provision of substantial residential capacity close to work and transport, but no growth of employment potential of the site
- under-utilisation of ground floor space available for lifting and building cores
- difficulty in providing apartments in the south-facing podium which would have adequate solar access

5.2. Commercial office only

A commercial-only use and form for the OSD would result in the provision of a single commercial building. This building form would result in the following general characteristics:

- provision of a building which would minimise setbacks to allow for a viable floorplate, reducing the setback distance to the surrounding street frontages
- provision of the substantial lift capacity required to support a large building population would result in a building which either have an inadequate number of lifts, or a building which would interfere with the station ground floor areas
- the provision of a building which results in a substantial boost to the employment potential of the site, but does not result in any increase to residential capacity of the site

- the provision of a building form which results in impacts on the surrounding public domain, in line with the required reduced setbacks and larger floorplate
- the provision of a use which substantially activates the surrounding street frontages during business hours, but does not provide activation on weekends or in the evenings

5.3. Retail only

A retail use and form for the OSD would result in the provision of a single retail building form. This building form would result in the following general characteristics:

- the provision of a building which would result in a podium only development, with no tower form above
- the provision of delivery and loading facilities which would substantially exceed the maximum available capacity under the loading arrangements approved under the CSSI Approval
- the provision of nil setbacks above the 45m podium height limit, resulting in substantial impacts on public domain daylight access
- some additional activation to the surrounding area both inside and outside of traditional business hours and provision of services to meet the needs of existing workers, residents and visitors to the CBD (noting the substantial activation and retail availability already located in the Sydney CBD)

5.4. Visitor accommodation only

A visitor accommodation-only use and form for the OSD would result in the provision of a single building form, comprising podium and tower areas. This building form would result in the following general characteristics:

- the provision of a building which would comprise a podium and either one or two towers above
- the provision of substantial ground floor loading spaces, including on street visitor arrival facilities
- a boost to the employment potential of the site, but does not result in any substantial increase to residential capacity of the site
- activation of the surrounding area through all hours of the day and night, albeit at a generally lower rate than more intensive uses
- an increased tourist and visitor accommodation capacity at the site, which would grow the capacity of the wider visitor economy and the public profile of Sydney as a major tourist destination

5.5. Student accommodation only

A student accommodation use and form for the OSD would likely result in one or two towers above a podium. This building form would result in the following general characteristics:

- provision of a building which would comprise a podium development with a tower above
- the provision of a building which results in a minor addition to the employment potential of the site alongside a significant boost to the resident accommodation capacity of the site
- the provision of a building form which activates the surrounding area through all hours of the day and night, albeit at a lower level
- support growth of Sydney's tertiary education sector and accommodate additional educational export capacity

5.6. Mixed use

A mixed use for the OSD would result in the provision of a mixed use building form, which would include the following general characteristics:

- the provision of a building which would comprise a podium and tower development, comprising one or two towers above
- the provision of mixed uses at the site, which would likely comprise a mixture of residential, visitor accommodation and commercial uses
- the provision of loading which is adequate for the OSD uses, and can be managed in conjunction with station operations
- the provision of a building which results in both a substantial boost to the employment and residential capacity of the site
- the provision of a building form which activates the surrounding area through all hours of the day and night

5.7. Do nothing (station only)

A 'do nothing' option would result in a development form which does not include the provision of any OSD, and accordingly comprises the following:

- provision of only the station building form, without any development above the CSSI Approved envelope
- provision of loading and car parking within the station which is substantially excess to requirements and underutilised
- the provision of a building which does not contribute to either the employment or residential capacity of the site

- the provision of a building form which does not activate the surrounding area, with the exception of the station
- a lost opportunity for the integration of land use and transport at the station precinct

6. Assessment

6.1. Assessment criteria

As discussed at **Section 4.2**, there are a number of constraints which affect the potential and nature of any OSD proposal above the northern portal of Pitt Street Station. In light of these, a key set of assessment criteria have been designed to provide a balanced assessment of the most appropriate uses at the site. The criteria for the proposal have been designed to tailor the key opportunities and constraints of OSD at the site, as well as an assessment with the site's surroundings.

The key criteria have been described below.

6.1.1. Appropriate locational context

An evaluation of the relative suitability of the site for each use has been undertaken, in regards to the Central Sydney context afforded by the site. An optimal land use outcome would result in the OSD directly addressing one or more land uses which are considered highly appropriate for the site, such that the proposed development outcome at the site would result in a proposal which is considered suitable and viable. A use which is not considered appropriate in the Central Sydney context of the site would be discouraged.

6.1.2. Adequacy of ground floor space for entry and lobby facilities

Given the nature of the Sydney Metro station occupying a large portion of the ground floor plane and the basement areas for station uses, a key consideration in the appropriateness of any OSD building form is the ability for it to be accommodated within the limited ground floor plane available.

An optimal land use outcome would result in an appropriate level of impact on the ground floor plane, so as to ensure that the metro station operations are not impacted by the OSD land use. A land use which results in substantial interruption of Metro Station operations would be discouraged.

6.1.3. Adequacy car parking and loading provision

Noting the constraints imposed by the underground metro station, as well as the Central Sydney context of the site, this category assesses the ability for each land use to provide car parking to meet the needs of the land use without disrupting the surrounding road and pedestrian networks. An optimal land use outcome would result in a land use which takes advantage of the parking area provided under the CSSI Approval, but also does not result in any adverse impacts to the surrounding environment and transport networks. Land uses which require the provision of excessive levels of car parking outside of the station podium, result in adverse car parking impacts, or have the potential to disrupt the operations of either the shared loading area or the wider surrounding pedestrian and street network would be discouraged.

An examination of the loading and servicing requirements has been undertaken of each land use in order to ensure sufficient loading and servicing capacity is included in the future development form. It is specifically noted that the shared nature of the OSD and station loading

areas means that the OSD loading provisions must be managed so as not to unreasonably interrupt or disrupt station servicing. An optimal land use outcome would result in the provision of loading and servicing requirements which could meet the needs of the occupants of the building, whilst also ensuring that the operations of Pitt Street Metro Station are not adversely impacted by the OSD. Uses which substantially disrupt the loading network, or are unable to be accommodated within the loading areas approved under the CSSI Approval would be discouraged.

6.1.4. **Adequacy of vertical lifting**

As with a number of other key constraints at the site, the ability for people and goods to be vertically transported through the site affects any determination of the most suitable land use for the OSD. In this way, the relative typical requirements for each land use have been reviewed in regards to vertical transport of people and goods through the development. This includes the constraints prescribed by both pedestrian and vehicular elevator or escalator requirements, as well as other vertical transport requirements including emergency egress stairwells and garbage chutes.

An optimal land use outcome would result in the ability to safely and efficiently move people and goods to and from all storeys of the development with minimal disruption. Land uses which require the dedication of a large portion of the overall floorplate for vertical transport, which disrupt the ground floor plate or are unable to be safely accommodated within the envelope would be discouraged.

6.1.5. **Floor plate and size**

An evaluation of the typical floor plate characteristics of each category of land use including typical floor dimensions, resulting areas, room layouts, circulation areas, amenity requirements and market demands has been undertaken. This category also includes a detailed assessment of the proposal to achieve an efficient use of the land available at the site in a manner which ensures that the Integrated Station Development will present a holistic overall outcome.

On this basis, an optimal land use outcome would comprise a building which responds as best as possible to the constraints and opportunities afforded by the site in providing a reasonable development form which does not result in any adverse impacts, whilst delivering a high level of amenity to future occupants. An optimal land use outcome will also ensure that floor space potential available at the site is used in an efficient manner. Uses which result in adverse impacts as a result of typical floor plate characteristics would be discouraged.

6.1.6. **Impact on adjacent properties and the public domain**

In line with the above comment, a broader review of the impacts of each land use on the surrounding public domain and adjacent properties has also been considered as part of this assessment. Specific impacts contemplated include the likely impacts of a typical floor plate on surrounding residential properties, adjacent heritage items and ground floor street presentation and amenity. An optimal land use outcome would result in a development form

which does not result in any adverse impacts on the surrounding environment. A land use outcome which would result in adverse environmental impacts would be discouraged.

6.1.7. Takes advantage of the opportunities afforded by Sydney Metro

Finally, there are significant opportunities afforded by Sydney Metro itself, in the provision of high quality Metro Rail to the Sydney CBD.

Commensurate with this, an optimal land use would take advantage of the city changing nature of the Metro project by providing a land use which contributes to the future development of Central Sydney. Uses which fail to sufficiently take advantage of the opportunities afforded by the Sydney Metro project would be discouraged.

6.2. Comparison

In order to provide a balanced comparison of the different available development use options, a scoring system has been applied to each of the options. This enables a comparative analysis to be undertaken which compares the ability for each development option to respond to the criteria outlined at **Section 6.1**. Specifically, the following criteria have been used to support this:

- Sub-optimal Performance: The land use is unable to achieve the identified criteria, or will result in substantial impacts from the development of a typical building form in line with the nominated criteria.
- Average Performance: The land use is able to achieve the identified criteria, to a level which is considered adequate.
- Optimal Performance: The land use is able to achieve the identified criteria in the optimal manner.

| | Appropriate locational context | Adequacy of ground floor space for entry and lobby facilities | Adequate car parking provision | Adequacy of vertical lifting | Floor plate and size | Impact on adjacent properties | Takes advantage of opportunities afforded by Sydney Metro |
|------------------------------------|--------------------------------|---|--------------------------------|------------------------------|----------------------|-------------------------------|---|
| (a) Residential land use | ● | ● | ● | ● | ● | ● | ● |
| (b) Commercial office land use | ● | ● | ● | ● | ● | ● | ● |
| (c) Retail land use | ● | ● | ● | ● | ● | ● | ● |
| (d) Visitor accommodation land use | ● | ● | ● | ● | ● | ● | ● |
| (e) Student accommodation land use | ● | ● | ● | ● | ● | ● | ● |
| (f) Proposed mixed land uses | ● | ● | ● | ● | ● | ● | ● |
| (g) Do nothing | ● | ● | ● | ● | ● | ● | ● |

The above criteria have been translated visually to the colours red, orange and green, respectively. This has resulted in the comparison diagram provided at **Figure 13** below.

- 1 = Sub-optimal Performance - Results in adverse outcome
- 2 = Average Performance - Results in adequate outcome
- 3 = Optimal Performance - Results in ideal outcome

Figure 13: Relative comparison of potential different land uses at the site

When these criteria are applied with values of 1 (sub-optimal), 2 (average) or 3 (optimal) to determine an overall score for each option, the results at **Table 2** are produced. **Figure 14** provides a comparative representation of how each option performs relative to the others.

Table 2 – Value of each option proposed, in accordance with the Weighted Values prescribed

| Option Reference | Development Option | Weighted Score |
|------------------|---|----------------|
| (a) | Residential land use only, above the station podium | 18 |
| (b) | Commercial office land use only, above the station podium | 13 |
| (c) | Retail land use only, above the station podium | 14 |
| (d) | Visitor accommodation land use only, above the station podium | 18 |
| (e) | Student accommodation land use only, above the station podium | 16 |
| (f) | Proposed mix of land uses | 20 |
| (g) | Do nothing (i.e. station podium only) | 9 |

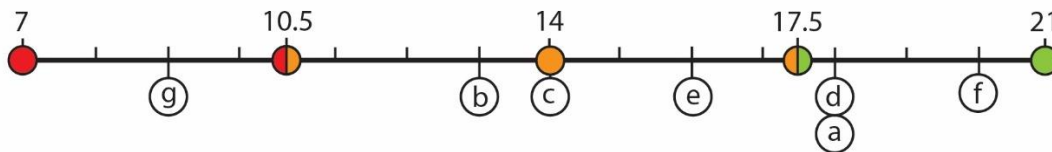


Figure 14: Relative comparison of potential different land uses at the site

Each use has been further analysed and discussed on the basis of these findings at **Section 7**.

7. Analysis of use strategic merit

In light of the results provided at **Section 6** above, an analysis has been undertaken of each option in this section. This provides further clarity and expands upon the results provided at **Section 6.2**, as well as providing additional analysis as to why each option is appropriate or inappropriate at the site.

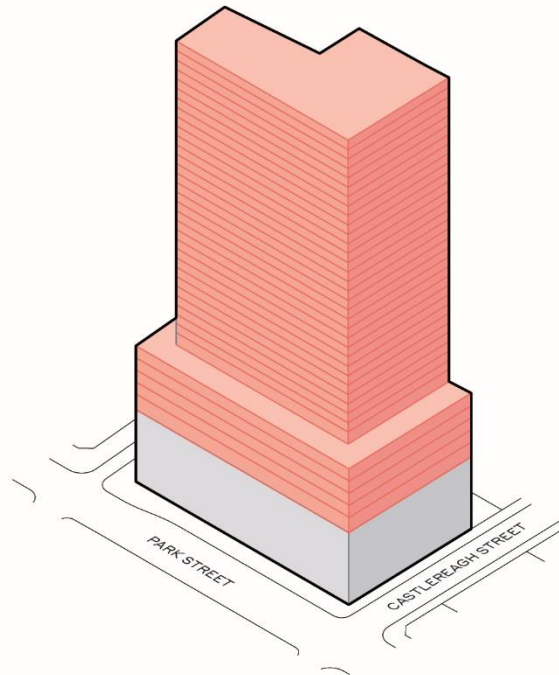
7.1. Residential use OSD (option [a])

A fully residential use scheme would involve the provision of either one or two residential towers above the station podium. Specifically, the following options have been reviewed as part of this analysis:

- A residential OSD option which comprises one single tower above a residential podium
- A residential OSD option which comprises two towers above only the station podium (i.e. no residential podium component).

This option would comprise a single consolidated tower form, which in this case has been added to a residential podium. At a high level communal facility location has not been considered, however could be located in either the podium or the tower components of the development. The tower portion of the development would be set back a weighted average of 8m, except for at the northern boundary which would include the provision of a nil setback.

The principle issue with this scheme would be the inability for a residential development such as this to comply with SEPP 65, given the low amenity levels of the lower levels of the building. This option has been demonstrated at **Figure 15** below.



Residential land use above a station

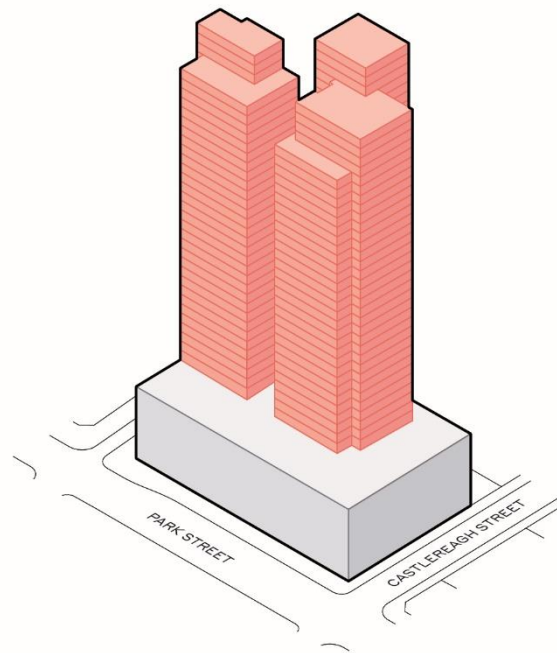
Legend

■ Residential ■ Sydney Metro Station

Figure 15: A single tower residential OSD outcome at the site

A dual tower version has also been considered as part of this analysis, which comprises no podium area, and the provision of two towers only. The two towers would comprise an 11.5m internal separation, as well as 8m weighted average setbacks to all street frontages. A nil setback would continue to be provided at the northern boundary of the site. This has been undertaken to ensure that the development can achieve a higher level of amenity to apartments. This option provides for a better outcome for residents at the site, and would also result in the division of the building form into two distinct elements, which are both considered to be substantial benefits.

However, there remains a substantial issue that given that the floor area at this site can accommodate multiple uses. It is therefore considered that a mixed use outcome would have a positive impact on the surrounding environment, including the provision of a building form which actively generates employment at the site. This option would also struggle to achieve amenity requirements at the lower levels of the development.



Residential land use above a station -variation 1

Legend

- Residential
- Sydney Metro Station

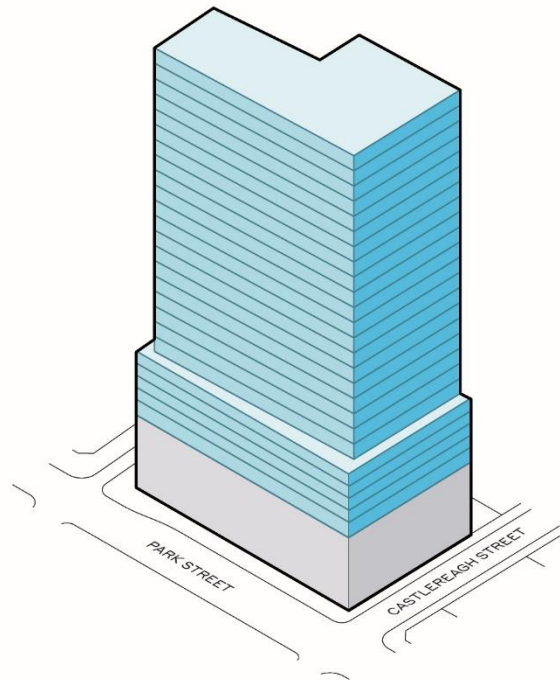
Figure 16: A dual tower residential OSD outcome at the site

7.2. Commercial use OSD (option [b])

Commercial office use of the OSD would comprise the provision of a single commercial tower, above a podium area. It is likely that, in order to provide economical floorplates, the setbacks of a commercial option would be reduced, resulting in a shorter, but wider tower building.

This option results in a score at the lower to middle end of the scale, principally due to the impacts of the commercial development and its associated floorplate. Effectively, under this option a building form needs to have sufficient floor space to result in a marketable area, result in setbacks that substantially impact on the surrounding public domain, or a combination of both. In the provided option, a setback of 4m to all street frontages has been contemplated. Additionally, the substantial lifting requirements for a large office tower and the structural impacts of the resulting lift-core would impact on the layout of the station.

An example commercial scheme has been provided at **Figure 17**, which demonstrates how such a scheme may appear.



Commercial land use above a station
 Legend
■ Commercial ■ Sydney Metro Station

Figure 17: A commercial OSD outcome at the site

7.3. Retail use OSD (option [c])

Retail accommodation use of the OSD would comprise the provision of retail development across the full podium of the development, including some additional retail storeys beyond the 45m maximum podium height. However, given the nature of retail development, a tower building form is not envisaged under this land use option, given that it would not be a viable land use outcome at the site.

On the basis of the above land use outcome, the proposed development would likely result in a building form outcome similar to that depicted at **Figure 18** below. This would result in adverse outcomes to the operation of the surrounding area, as well as the operation of the station at the ground floor plane in particular. This is due to the high intensity of such a use for pedestrian and delivery access to the site. Although it may be able to be accommodated on a larger site, a solely retail presence at the Pitt Street North site would not be suitable. Additionally, there is significant potential for the proposed setbacks to impact public domain amenity, including light levels.

Additionally, given the nature of retail development being generally limited to development of approximately 10 storeys, it is very unlikely that there would be substantial ability to take advantage of the full floorspace permissible at the site. This would comprise a lost opportunity, and accordingly, this option has not been pursued.

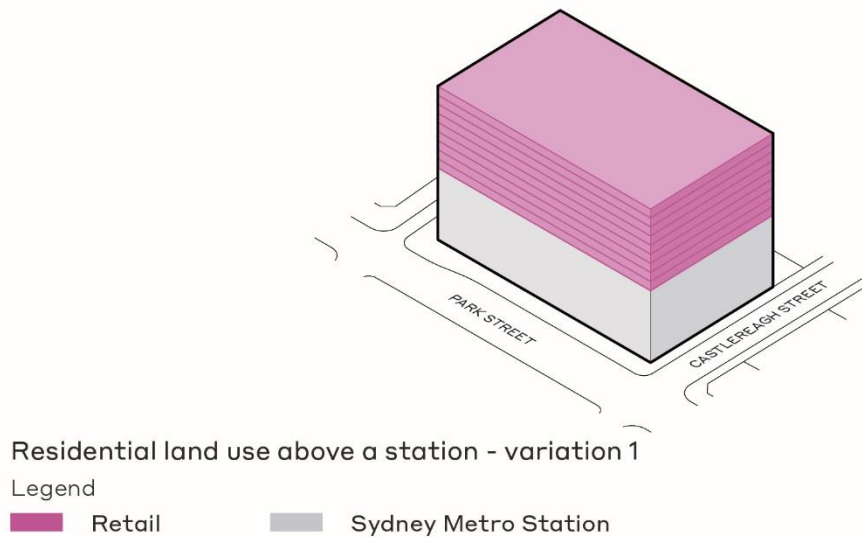


Figure 18: A retail OSD outcome at the site

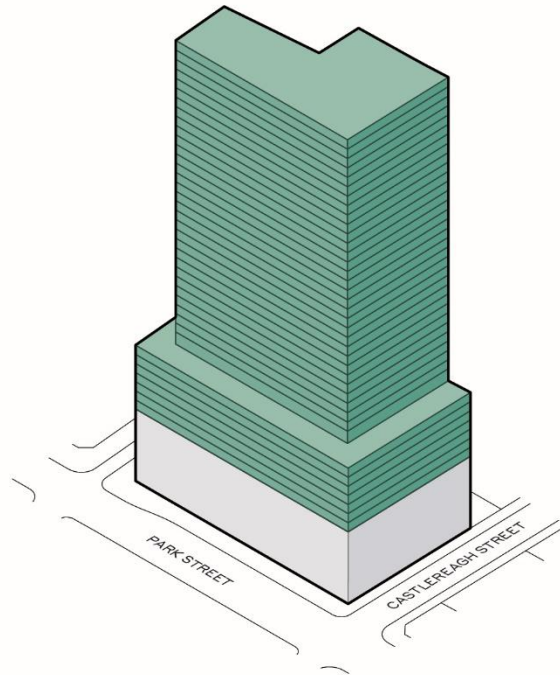
7.4. Visitor accommodation use OSD (option [d])

Visitor accommodation use of the OSD has been considered as part of this analysis, comprising the provision of a single visitor accommodation building above the station portal. This option scored very favourably through the assessment, resulting in the second highest scoring of all options considered. Principally this is due to visitor accommodation being a highly sought after use in Central Sydney which would take advantage of the opportunities afforded by visitor accommodation.

Although some visitor accommodation is capable of being accommodated at the site, it is noted that a fully visitor accommodation use scheme is not an ideal outcome at the site. This is due to the substantial loading requirements that visitor accommodation has on the surrounding street networks, which would impact on both the limited ground floor space available as well as the functionality of the surrounding street network.

An example visitor accommodation only scheme has been provided at **Figure 19**, which demonstrates how such a scheme would work.

Instead, the proposed development includes a reduced visitor accommodation component which has been applied as one of three land uses above the station portal. This option, if built to the maximum allowable floor space would yield in the order of 1,200 rooms, which would have unacceptable impacts on the traffic functionality of the surrounding road network.



Visitor accommodation land use above a station
 Legend
 Visitor accommodation Sydney Metro Station

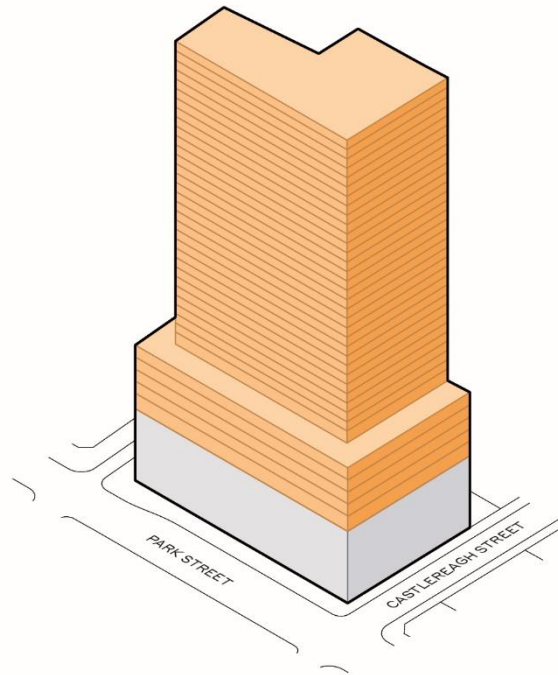
Figure 19: A visitor accommodation OSD outcome at the site

7.5. Student accommodation use OSD (option [e])

A student accommodation use for the OSD has been considered as part of this analysis, comprising an option whereby the station has a student accommodation building located above. It is noted that the student accommodation development outcome scored highly in a number of different categories, resulting in it being the fourth ranked option of those considered.

However, given the location of the development, student accommodation demand is superseded at this site by a number of other uses, including residential, commercial and visitor accommodation. On this basis, a student accommodation option has not been pursued. This option would also result in the provision of space in the podium which would be generally wasted, given that there would be limited need for the uses contemplated within the station podium, such as car parking.

An example student accommodation scheme has been provided at **Figure 20**, which demonstrates how such a scheme would work.



Student accommodation above a station

Legend

 Student accommodation  Sydney Metro Station

Figure 20: A student accommodation OSD outcome at the site

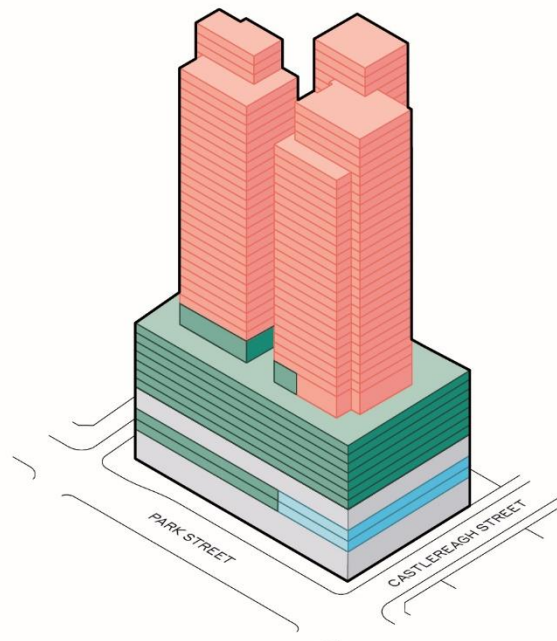
7.6. Proposed mixed land uses (option [f])

A mixed use option has been considered through this assessment to be the optimal land use outcome at the site, comprising a mix of residential, visitor accommodation and commercial uses. This is the highest scoring option and is considered a highly appropriate land use outcome which would result in a lasting legacy of the future Metro Station. The diversity of land uses would work to enable the activation of the surrounding area throughout the day and night, whilst resulting in environmental impacts which are considered appropriate.

It is noted that this option would occupy substantial ground floor space with the various lobby and lifting facilities, however as part of the concept application it has been demonstrated that a proposal could be accommodated which would not adversely affect station operations, meaning that this option continues to be a viable option.

As part of this assessment, it is noted that alternate mixed uses would also potentially be able to be considered appropriate for the site, even though only one 'mixed use' option has been contemplated under this strategic land use analysis. Other potential mixed use options have been included in the Design Report prepared by Architectus at **Appendix I** of the submitted EIS.

An example diagram of the proposed mixed use scheme has been detailed at **Figure 21** below.



Residential land use above a station -variation 2

Legend

- | | | |
|--|--|--|
| ■ Residential | ■ Sydney Metro Station | ■ Visitor accommodation |
| ■ Commercial | ■ Plant | |

Figure 21: A mixed use OSD outcome at the site (as has been proposed)

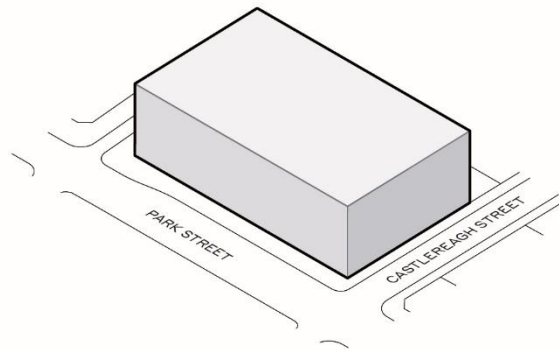
7.7. Do nothing (option [g])

A ‘do nothing’ option, whereby there is no OSD component, and only the Pitt Street Station northern portal on its own would be constructed at the site. This is the lowest scoring option out of this analysis, which is principally due to the key issue that the CSSI Approval contemplated development for OSD purposes in the design of the station.

This involved designing the station to ensure that an OSD component could structurally be positioned above, as well as the allocation of substantial space within the ground floor plane and podium for use of the OSD. To not take advantage of this substantial design work would be an inefficient use of resources, and result in a sub-par outcome at the site. Not constructing an OSD component would result in unused areas at the ground floor plane, which would have negative streetscape and safety implications.

In effect, the lack of an OSD component above the Pitt Street North site would fail to ensure that the OSD takes advantage of the site’s location, and proximity to infrastructure, resulting in a sub-par outcome at the site. It is a key planning principle that land use intensity should be located where additional transport capacity is located, which makes the site an excellent potential location for the OSD component.

An example axonometric demonstrating a ‘do nothing’ outcome at the site has been provided at **Figure 22** below.



Station only

Legend

■ Sydney Metro Station

Figure 22: A 'do nothing' OSD outcome at the site

8. Conclusion

This Strategic Land Use Analysis has undertaken a detailed review of a number of different potential land uses at the Pitt Street North site, in order to determine the most appropriate land use outcome for the OSD component. The following key options have been reviewed as part of this assessment:

- Residential
- Commercial
- Retail
- Commercial office
- Visitor accommodation
- Student accommodation
- Mixed
- A 'do nothing' option, whereby no OSD is proposed

Overall, it has been considered that a mixed use outcome at the site is highly desirable. The proposal seeks to develop this further, by building on strengths of other options in ensuring that the optimal outcome has been proposed at the site. Specifically, the higher amenity areas are proposed for residential use, while the podium is used for economic activity generating commercial and visitor accommodation uses.

Visitor accommodation only and retail only options are noted to not be able to sufficiently use the available floor space area above the station, while a residential only option would not be able to use the podium volume due to potential impacts on solar access.

The OSD would result in a vibrant mixed use precinct above a key future transport interchange in Sydney. This assessment has demonstrated that the proposed land use outcome would result in the satisfaction of key criteria, and accordingly has informed the development of the concept SSD Application.