

# 2 AND 8A LEE STREET, HAYMARKET

TRAFFIC AND TRANSPORT ASSESSMENT | 16 DECEMBER 2022

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## 2 and 8a Lee Street, Haymarket

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## **Executive Summary**

This traffic and transport assessment has been prepared by Stantec to accompany a detailed State Significant Development (SSD) Development Application (DA) for the mixed-use redevelopment of the Adina Central site, located at 2 & 8A Lee Street, Haymarket (the site). The site is legally described as Lot 30 in Deposited Plan 880518 and Lot 13 in Deposited Plan 1062447. The site is also described as 'Site C' within the Western Gateway sub-precinct at the Central Precinct. This report has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued for the SSD DA (SSD 33258337).

The site is currently occupied by the 98-room Adina Apartment Hotel Sydney Central (Lot 30) and various specialty retail stores fronting Henry Deane Plaza (Lot 13). The proposal is for a significantly expanded hotel comprising approximately 204 rooms, commercial office space covering 29,228 square metres gross floor area (GFA) and lower level retail space across 4,511 square metres GFA.

The proposal is closely aligned with one of City of Sydney Council key ambitions to provide employment growth in well located new tower clusters where taller buildings with higher floor space ratios are permitted for income-earning uses. The proposal integrates with future pedestrian zones planned through the precinct including new over and under platform connections linking the station with Railway Square through the precinct; as well as two new grade separated connections between the Adina and Atlassian YHA sites. A future under platform connection to the north of the site ('Western Walk') is envisaged to transform Ambulance Avenue into a pedestrianised corridor.

Given the sites' prime location close to high frequency and capacity public transport services and the low parking provisions anticipated for the site (less than 110 spaces), mode share targets have been developed for travel behaviours for the future population of the site, specifically approximately 60 per cent of worker trips by train and 20 per cent by bus, whilst trips by vehicle (as driver) are targeted to account for less than four per cent.

Car parking provisions are compliant with the City of Sydney LEP 2012 requirements, with proposed bicycle and loading provisions considered appropriate based on first principles assessments completed to understand likely demands.

This report concludes that the proposed mixed-use redevelopment is suitable and warrants approval subject to the implementation of the following mitigation measures:

- Promotion of green travel initiatives.
- Implementation of loading dock management measures to increase efficiency and better distribute deliveries throughout the day.
- Management of the cumulative construction vehicle activity with the adjacent sites in the precinct.





# 1 Introduction

## 1.1 Background and Proposal

This report has been prepared to accompany a SSD DA for the mixed-use redevelopment proposal at TOGA Central, located at 2 & 8A Lee Street, Haymarket.

The Minister for Planning, or their delegate, is the consent authority for the SSD DA and this application is lodged with the NSW Department of Planning and Environment (DPE) for assessment.

The purpose of the SSD DA is to complete the restoration of the heritage-listed building on the site, delivery of new commercial floorspace and public realm improvements that will contribute to the realisation of the Government's vision for an iconic technology precinct and transport gateway. The application seeks consent for the conservation, refurbishment and adaptive re-use of the Adina Hotel building (also referred to as the former Parcel Post building (fPPb)), construction of a 45-storey tower above and adjacent to the existing building and delivery of significant public domain improvements at street level, lower ground level and within Henry Deane Plaza. Specifically, the SSD DA seeks development consent for:

- Site establishment and removal of landscaping within Henry Deane Plaza.
- Demolition of contemporary additions to the fPPb and public domain elements within Henry Deane Plaza.
- Conservation work and alterations to the fPPb for retail premises, commercial premises, and hotel and motel accommodation. The adaptive reuse of the building will seek to accommodate:
  - Commercial lobby and hotel concierge facilities.
  - Retail tenancies including food and drink tenancies and convenience retail with back of house areas.
  - 4 levels of co-working space.
  - Function and conference area with access to level 7 outdoor rooftop space.
  - Reinstatement of the original fPPb roof pitch form in a contemporary terracotta materiality.
- Provision of retail floor space including a supermarket tenancy, smaller retail tenancies, and back of house areas below Henry Deane Plaza (at basement level 1 (RL12.10) and lower ground (RL 16)).
- Construction of a 45-storey hotel and commercial office tower above and adjacent to the fPPb. The tower will have a maximum building height of RL 202.28m, and comprise:
  - 10 levels of hotel facilities between level 10 – level 19 of the tower including 204 hotel keys and 2 levels of amenities including a pool, gymnasium and day spa to operate ancillary to the hotel premises. A glazed atrium and hotel arrival is accommodated adjacent to the fPPb, accessible from Lee Street.
  - 22 levels of commercial office space between level 23 – level 44 of the tower accommodated within a connected floor plate with a consolidated side core.
  - Rooftop plant, lift overrun, servicing and BMU.
- Provision of vehicular access into the site via a shared basement, with connection points provided to both Block A (at RL 5) and Block B (at RL5.5) basements. Primary access will be



## 2 and 8a Lee Street, Haymarket

### 1 Introduction

accommodated from the adjacent Atlassian YHA site at 8-10 Lee Street, Haymarket, into 4 basement levels in a split-level arrangement. The basement will accommodate:

- Car parking for 106 vehicles, 4 car share spaces and 6 loading bays.
  - Hotel, commercial and retail and waste storage areas.
  - Plant, utilities and servicing.
- Provision of end of trip facilities and 223 employee bicycle spaces within the fPPb basement, and an additional 72 visitor bicycle spaces within the public realm.
  - Delivery of a revitalised public realm across the site that is coordinated with adjacent development, including an improved public plaza linking Railway Square (Lee Street), and Block B (known as 'Central Place Sydney'). The proposal includes the delivery of a significant area of new publicly accessible open space at street level, lower ground level, and at Henry Deane Plaza, including the following proposed elements:
    - Provision of equitable access within Henry Deane Plaza including stairways and a publicly accessible lift.
    - Construction of raised planters and terraced seating within Henry Deane Plaza.
    - Landscaping works within Henry Deane Plaza.
  - Utilities and service provision.
  - Realignment of lot boundaries.

This report has been prepared in response to the Secretary's Environmental Assessment Requirements (SEARs) issued for the SSD DA and dated 17 December 2021. Specifically, this report responds to the SEARs requirements referenced in Table 1.

**Table 1: Secretary's Environmental Assessment Requirements (SSD-33258337)**

| Sears Requirement   | Relevant Report Section |
|---|-------------------------|
| <b>Concept Proposal</b>   |                         |
| <i>Traffic, Transport and Accessibility</i>   |                         |
| <ul style="list-style-type: none"> <li>• Provide a transport and accessibility impact assessment, which includes:               <ul style="list-style-type: none"> <li>○ an analysis of the existing transport network, including the road hierarchy and any pedestrian, bicycle or public transport infrastructure, current daily and peak hour vehicle movements, and existing performance levels of nearby intersections.</li> </ul> </li> </ul>   | Section 3               |
| <ul style="list-style-type: none"> <li>○ details of the proposed development, including pedestrian and vehicular access arrangements (including swept path analysis of the largest vehicle and height clearances), parking arrangements and rates (including bicycle and end-of-trip facilities), drop-off/pick-up-zone(s) and bus bays (if applicable), and provisions for servicing and loading/unloading.</li> </ul>   | Section 1.1 & Section 4 |
| <ul style="list-style-type: none"> <li>○ analysis of the impacts of the proposed development (including justification for the methodology used), including predicted modal split, a forecast of additional daily and peak hour multimodal network flows as a result of the development (using industry standard modelling), identification of potential traffic impacts on road capacity, intersection performance and road safety (including pedestrian and cyclist conflict) and any cumulative impact from surrounding approved developments measures to mitigate any traffic impacts, including details of any new or upgraded</li> </ul> | Section 4.8             |



| Sears Requirement  | Relevant Report Section |
|--|-------------------------|
| infrastructure to achieve acceptable performance and safety, and the timing, viability and mechanisms of delivery (including proposed arrangements with local councils or government agencies) of any infrastructure improvements in accordance with relevant standards.   |                         |
| <ul style="list-style-type: none"> <li>proposals to promote sustainable travel choices for employees, residents, guests and visitors, such as connections into existing walking and cycling networks, minimising car parking provision, encouraging car share and public transport, providing adequate bicycle parking and high-quality end-of-trip facilities, and implementing a Green Travel Plan.</li> </ul> | Section 7               |
| <ul style="list-style-type: none"> <li>Provide a Construction Traffic Management Plan detailing predicted construction vehicle movements, routes, access and parking arrangements, coordination with other construction occurring in the area, and how impacts on existing traffic, pedestrian and bicycle networks would be managed and mitigated.</li> </ul>   | Section 5               |

## 1.2 References

In preparing this report, reference has been made to the following:

- an inspection of the site and its surrounds
- Sydney Development Control Plan (DCP) 2012
- Sydney Local Environmental Plan (LEP) 2012
- Australian Standard/ New Zealand Standard, Parking Facilities, Parts 1, 2 and 6
- Greater Sydney Commission, *The Greater Sydney Region Plan*, 2018
- Greater Sydney Commission, *Eastern City District Plan*, 2018
- NSW Government, *Future Transport 2056*, 2018
- City of Sydney, Central Sydney Planning Strategy 2016-2036, 2016
- City of Sydney, Cycling Strategy and Action Plan – 2018-2030
- Pentelic Advisory, Preliminary Transport Context Analysis 2019
- Camperdown Ultimo Collaboration Alliance and Work Plan 2019
- Camperdown-Ultimo Place Strategy 2019
- Central Precinct Draft Strategy Vision, dated October 2019
- concept design plans for the planning proposal prepared by Bates Smart
- other documents and data as referenced in this report.



## 2 Strategic Context

### 2.1 Overview

The following key strategies and plans have influenced development opportunities in the broader area, and together will have real effects on future travel demand and mode splits for both workers, residents and visitors alike.

The introduction of Sydney Metro, Australia's biggest public transport project that will operate as a standalone railway covering more than 66 kilometres with 31 new metro stations in its initial stages, will generate real growth opportunities in the area. Sydney Metro City and Southwest is under construction linking Chatswood and Bankstown via new underground station precincts within the CBD and stretching through the existing line to Bankstown. With services due to commence in 2024, the Sydney Metro will improve travel time, capacity and reliability to key employment areas such as the Sydney CBD.

### 2.2 Relevant Strategies and Plans

#### 2.2.1 The Greater Sydney Region Plan 2018

The Greater Sydney Commission (GSC) is an independent organisation that leads metropolitan planning for Greater Sydney. It has prepared the Greater Sydney Region Plan which outlines how Greater Sydney will manage growth and guide infrastructure delivery. The plan has been prepared in conjunction with the NSW Government's Future Transport 2056 Strategy and informs Infrastructure NSW's State Infrastructure Strategy.

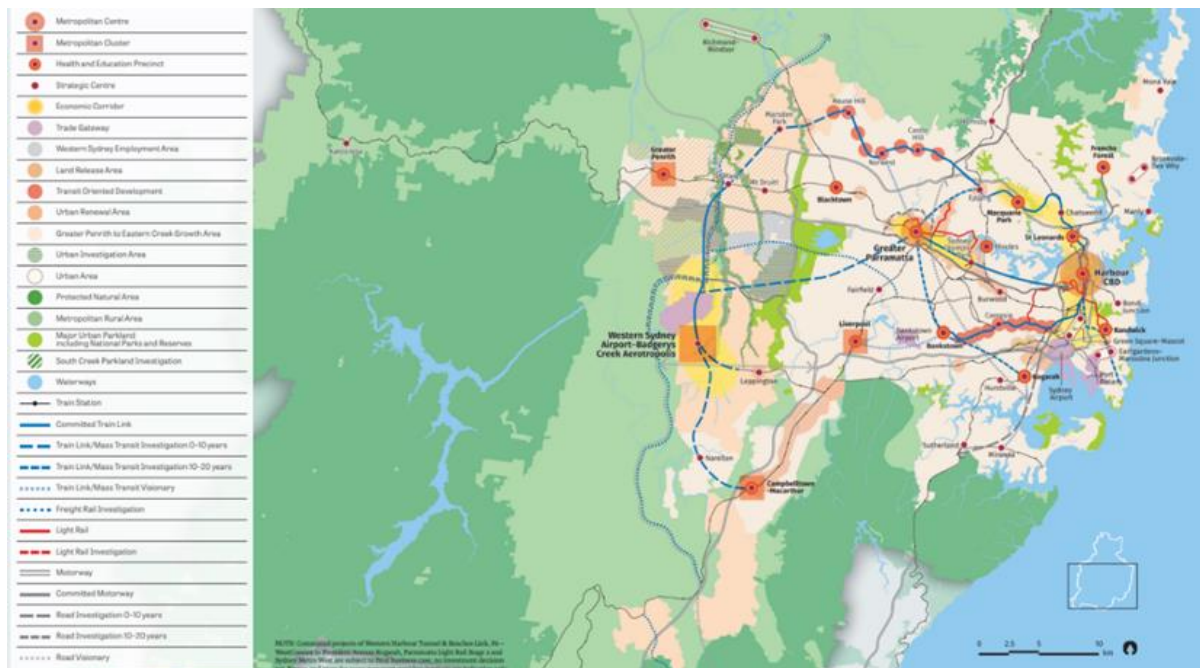
The GSC's vision is to create three connected cities; a Western Parkland City west of the M7, a Central River City with Greater Parramatta at its heart and an Eastern Harbour City. By integrating land use, transport links and infrastructure across the three cities, more people will have access within 30-minutes to jobs, schools, hospitals and services.

The Greater Sydney Region Plan is a 20-year plan with a 40-year vision and has four key focuses; infrastructure and collaboration, liveability, productivity and sustainability. The Greater Sydney Structure Plan 2056 is shown indicatively in Figure 1.





Figure 1: Greater Sydney Structure Plan 2056 – The Three Cities



Source: Greater Sydney Commission

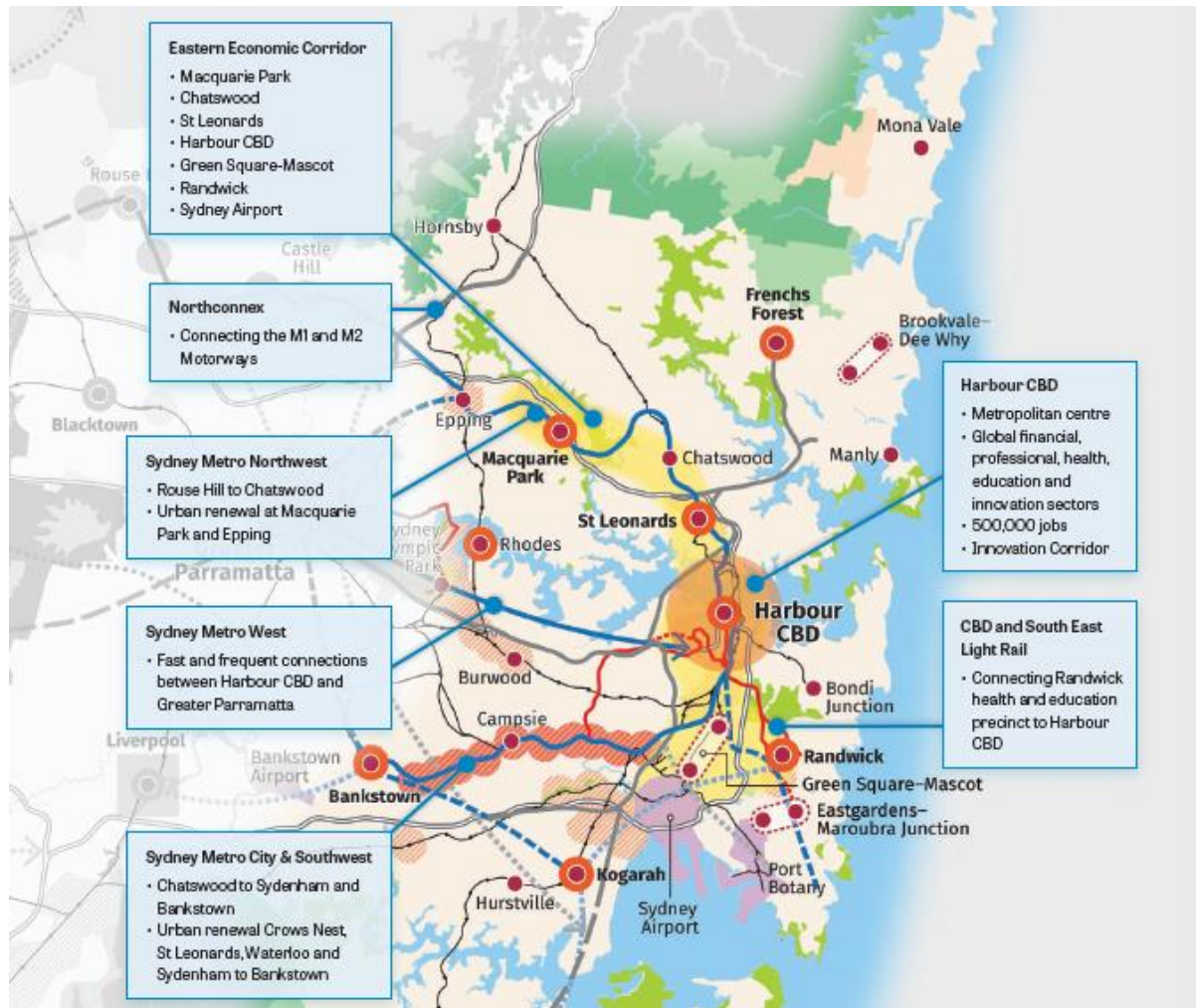
## 2.2.2 Eastern City District Plan

The Eastern City District is at the centre of the Eastern Harbour City. The metropolitan centre of the Eastern Harbour City, the Harbour CBD, is Australia's global gateway and financial capital, promoting growth to the District. The Eastern City District will grow substantially, due to its well-established, well-served and highly accessible Harbour CBD, generating half a million jobs and is the largest office market in the region. The new metro stations will improve access in the Harbour CBD.

The Plan puts emphasis on providing urban renewal around new and existing infrastructure. The focus of growth will be on well-connected walkable places that build on local strengths and deliver quality places. An integrated approach to the green infrastructure of the District – Waterways, bushland, urban tree canopy and open spaces – will improve sustainability. The Greater Sydney Green Grid will provide cool, green links to support walking, cycling and community access to open space.

The Eastern City District is shown in Figure 2.

Figure 2: The Eastern City District



Source: Greater Sydney Commission

### 2.2.3 Future Transport 2056

Future Transport 2056 provides a 40-year strategy for how transport will be planned, amended and forecasted within NSW, both regional and metropolitan, for the expected 12 million residents within the state. Future Transport 2056 follows from the 2012 Long Term Transport Master Plan which listed over 700 transport projects, the majority of which are completed or in progress. It also ties in with Greater Sydney Region Plan and the subsequent district plans to support the three cities metropolis vision.

Future Transport 2056 is supported by two key documents, Greater Sydney Services and Infrastructure Plan and Regional NSW Services and Infrastructure Plan, which provide guidance and planning for these areas.

From a metropolitan view, Future Transport 2056 and associated plans include the 30-minute city where jobs and services are within 30 minutes of residents with Greater Sydney. Strategic transport corridors to move people and goods are outlined between metropolitan and strategic centres, clusters and surrounds. The Movement and Place framework is also emphasised to support liveability, productivity and sustainability.



## **2.2.4 Central Sydney Planning Strategy 2016-2036**

The Central Sydney Planning Strategy is a 20-year growth strategy that delivers on the City of Sydney's Sustainable Sydney 2030 program. The Strategy identifies 10 key moves to meet the demands of growing numbers of workers, residents and visitors and their changing needs, using a place-led and people-focused approach. One of the key moves is to provide employment growth in well located new tower clusters where taller buildings with higher floor space ratios are permitted for income-earning uses. To balance this, another key move is to enhance public parks, spaces and views within Central Sydney with adequate sunlight to attract visitors, high-value jobs, tourists and residents.

The Strategy acknowledges the development opportunity of space above and around Central Station, and it identifies a public domain spine through Central Sydney along George Street with new public squares at Circular Quay, Town Hall and Railway Square.

Furthermore, the Strategy seeks to rationalise bus routes within Central Sydney, including the removal of bus routes from Lee Street and consolidating them along Broadway-George Street to the south to facilitate future expansion of Railway Square.

The Strategy proposes to reduce car movements through Central Sydney, identifying that the majority of commuter trips originate from Inner Suburbs where public transport is most available. It seeks to provide more space on Central Sydney streets for pedestrians and public transport as they accommodate most internal and inbound journeys compared to cars.

## **2.2.5 City of Sydney Cycling Strategy and Action Plan 2018 – 2030**

City of Sydney has issued a cycling strategy plan to meet the cycling needs of the Sydney CBD and surrounding suburbs, identifying active transport as the most accessible, equitable, sustainable, and reliable form of transport. The plan identifies an ambitious mode share target of 10 per cent within the city.

The plan builds on the 2007 to 2017 cycling strategy which preceded it. In retrospect, the plan has encouraged changing attitudes to cycling from government, developers and commuters, including TfNSW partial subsidy of cycling projects since 2015, real estate evaluations placing value on end of trip facilities and the increased cycling mode share observed in school students since 2007.

The plan, in summary, looks to:

- continue connecting the network, including completing regional routes, adding wayfinding and improving intersection design
- support people to ride, ensuring programs are evidence-based and responsive to the needs of a diverse community
- support businesses, including a bicycle-friendly workplace accreditation scheme and to
- lead by example.

## **2.2.6 Preliminary Transport Context Analysis 2019 – Pentelic Advisory**

Pentelic Advisory has completed a study on the strategic transport planning inputs for the City of Sydney Central Square Master Plan, particularly on Central Square (part of the “three squares” public domain). Notably, the transport implications for Central Square have been identified as:



- The need for effective and safe pedestrian movements within the square to accommodate its role as a major intermodal interchange (rail, metro, bus).
- The need to reduce driver traffic flow within the square to accommodate the above active and public transport development – notably Central Square is the only one directly constrained by major cross-city traffic movements.
- The potential to complete “missing links” within the cycling and pedestrian network in the city.
- The opportunity to “future-proof” rail development within the city by making provisions for future routes and stations.

## **2.2.7 Camperdown – Ultimo Collaboration Precinct**

The Camperdown – Ultimo Collaboration Precinct is recognised as the most significant innovation precinct in NSW with world-class health, education and research institutions, notably including Royal Prince Alfred Hospital, Australian Technology Park, and the tertiary education campuses situated within the Sydney CBD. Stakeholders have identified nine key objective markers to guide growth objectives:

1. High growth sectors, new jobs, and new investment.
2. Economic and social contribution to NSW.
3. Major contribution to research, discovery, and innovation.
4. Excellence in research and industry collaboration.
5. Excellent public transport, walking and cycling and great places.
6. Authenticity, character, outstanding architecture, engaging streetscapes, and built environment.
7. Resilient local community and business.
8. Diverse local community.
9. Attractiveness, liveability, and reliance of sustainable shared resources.

## **2.2.8 Camperdown – Ultimo Place Strategy**

The Camperdown – Ultimo Place Strategy has connectivity priorities and associated actions to achieve these priorities. Relating to transport, these are identified as to:

1. integrate and connect the Collaboration Area, within and beyond its edges
2. improve local transport options within the Collaboration Area.

Immediate imperatives associated with these priorities include:

- Advocacy for a mass transit system that strengthens connections between the Collaboration Area and Greater Sydney’s economic corridors.
- Implementing a pilot project along Broadway and Parramatta Road to reallocate road space and prioritise pedestrians between Central Station and key land uses on the Ultimo axis, while achieving an acceptable level of service for vehicles at the gateway to the Harbour CBD.

## **2.2.9 Western Gateway Sub-Precinct Design Guide**

The *Western Gateway Sub-Precinct Design Guide* (September 2021) provides guidance for development within the Western Gateway sub-precinct. The following points relate to traffic and transport:

- Any future development would provide an integrated basement for use by all Blocks in the sub-precinct.





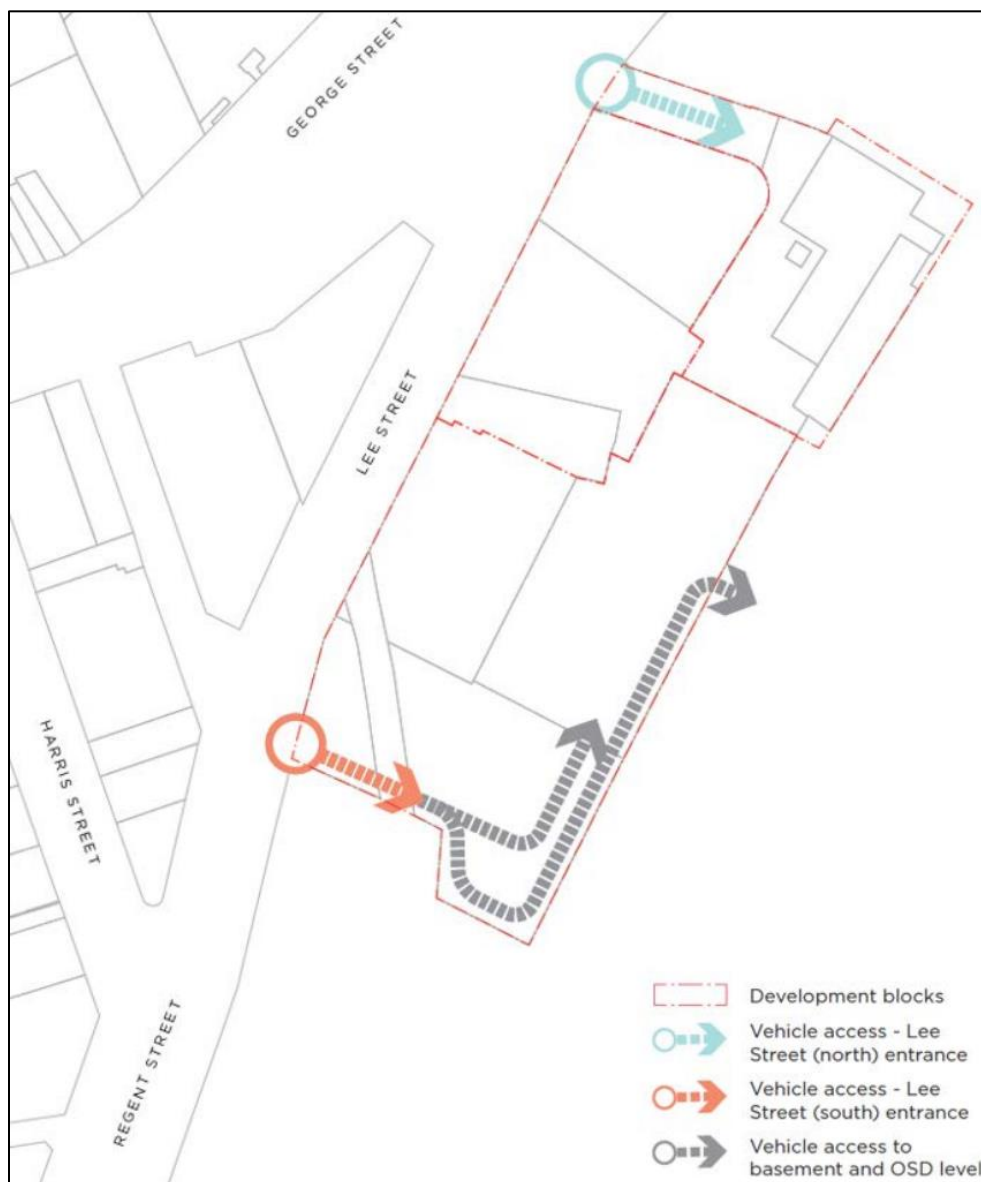
## 2 and 8a Lee Street, Haymarket

### 2 Strategic Context

- All on-site parking would be provided within underground basement parking levels.
- Site access is to be provided as follows:
  - Lee Street (south) is the primary access point for the sub-precinct
  - Lee Street (north) is an interim access until both Block A and C are provided access via the integrated basement level. This access will be closed permanently once the southern access is completed.
- End of trip facilities would be provided of a sufficient scale, in a location that is clearly visible and which supports direct and intuitive access for its users.

The required access arrangements are shown in Figure 3.

**Figure 3: Western Gateway sub-precinct vehicle access strategy**



Source: Western Sydney Gateway Sub-Precinct



### 2.2.10 Western Gateway Sub-Precinct Publicly Accessible Space Strategy

The Western Gateway Sub-Precinct Publicly Accessible Space Strategy (June 2021) provides a general framework for the sub-precinct's publicly accessible spaces. The strategy ensures that the Western Gateway Sub-Precinct and broader Central Precinct will prioritise pedestrian experiences, ensuring a precinct that encourages interaction, communication, collaboration, and relaxation.

The key directions of the strategy include:

1. *Clearly define the role and function of the publicly accessible spaces and connections*
2. *Provide multi-level pedestrian access*
3. *Prioritise movement*
4. *Celebrate the unique heritage and cultural values of the place*
5. *Address wind, solar and daylight.*

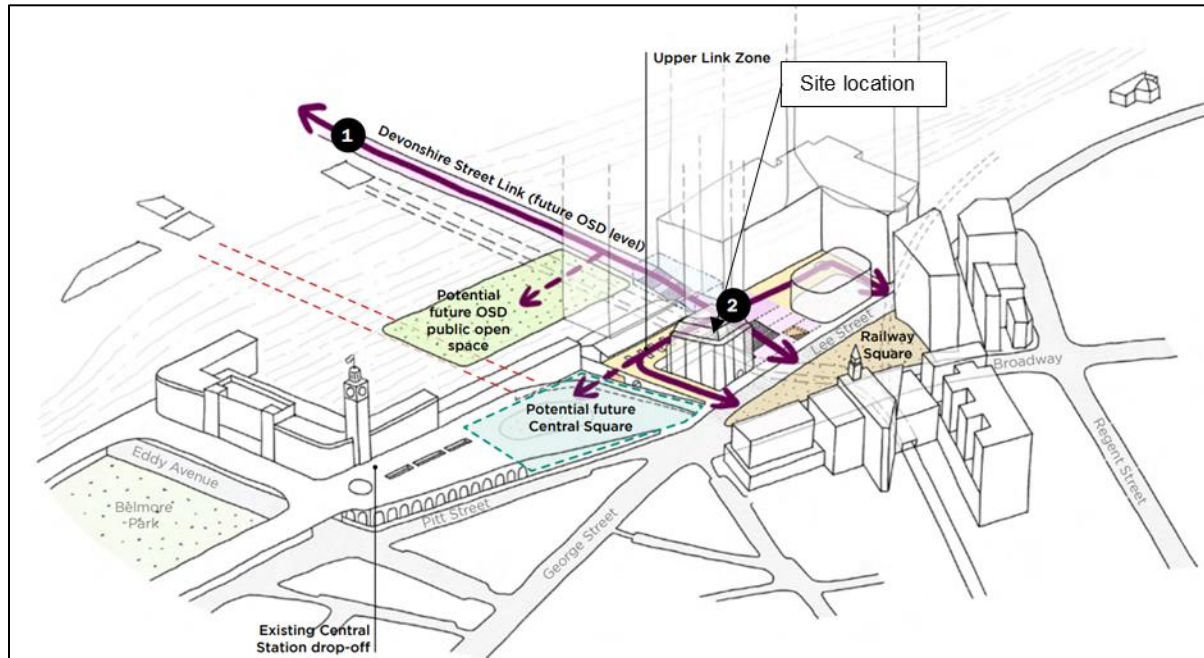
The Western Gateway Sub-Precinct will cater for a large number of pedestrians and must be designed to provide smooth and effective pedestrian flows. The key design principles for the Western Gateway Sub-Precinct include:

1. *Prioritise green pedestrian links*
2. *Connect people to transport*
3. *Encourage walking and cycling*
4. *Provide a safe and comfortable environment.*

Thus, the Sub-Precinct must prioritise the intuitive movement of pedestrians, providing clear and direct connections to public transport whilst also encouraging the use of cycling and other forms of active transport. It is envisaged that the Sub-Precinct will consist of an upper and lower level with the key current and future pedestrian links within the broader Central Precinct shown in Figure 4 and Figure 5 and within the Western Gateway Sub-Precinct specifically shown in Figure 6 and Figure 7. The upper level would primarily provide access to commercial buildings, public domain space, stair and lift connections to the lower level, and access to ground floor retail businesses. The lower level will largely allow for pedestrian movement providing connection to the Devonshire Tunnel to Surry Hills, Lee Street Tunnel to the bus interchange, and to Central Station. The lower level will also provide opportunity for retail uses.

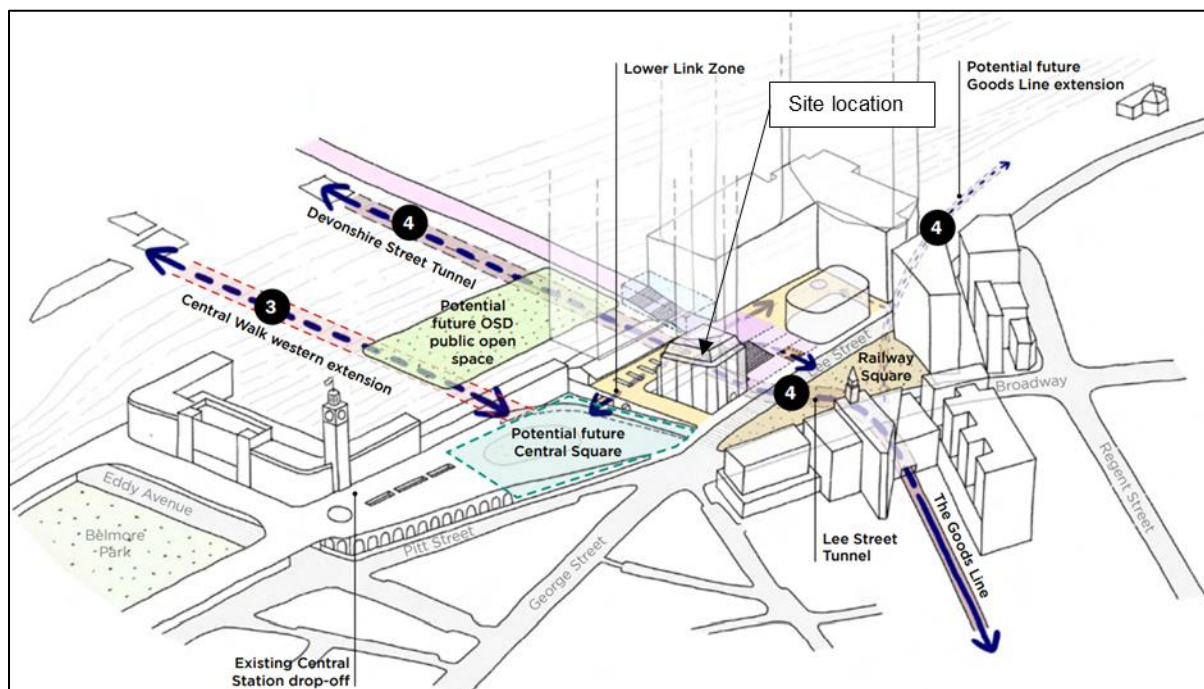
## 2 and 8a Lee Street, Haymarket 2 Strategic Context

**Figure 4: Key upper-level pedestrian links for current and future stage of Central Precinct**



Base image source: Western Gateway Sub-Precinct Publicly Accessible Space Strategy, Revision C, 22 June 2021

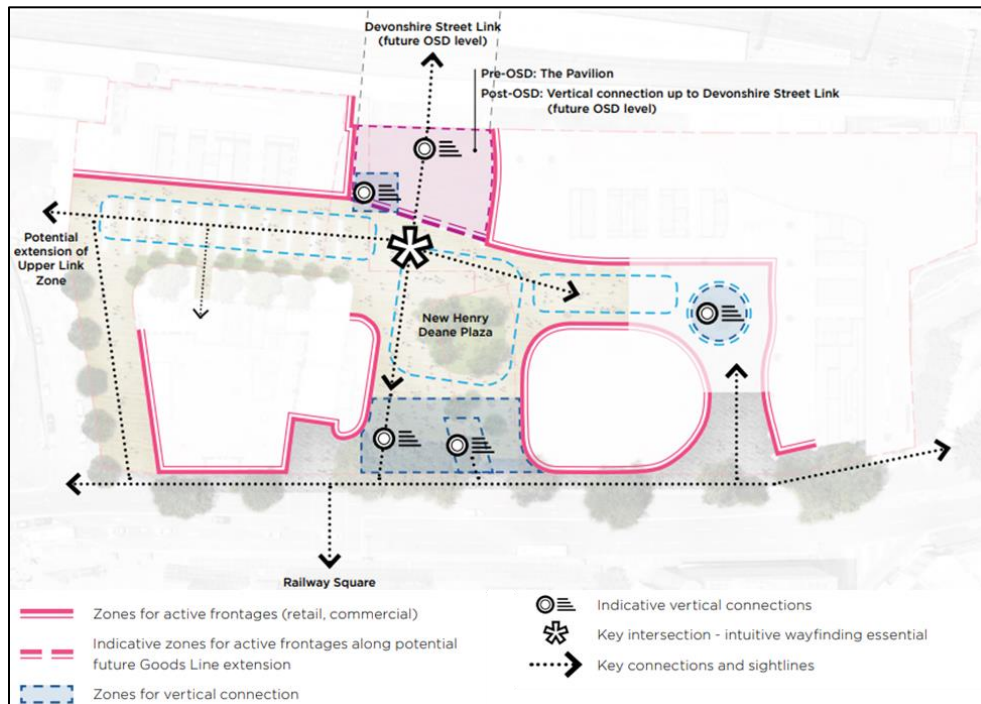
**Figure 5: Key lower-level pedestrian links for current and future stage of Central Precinct**



Base image source: Western Gateway Sub-Precinct Publicly Accessible Space Strategy, Revision C, 22 June 2021

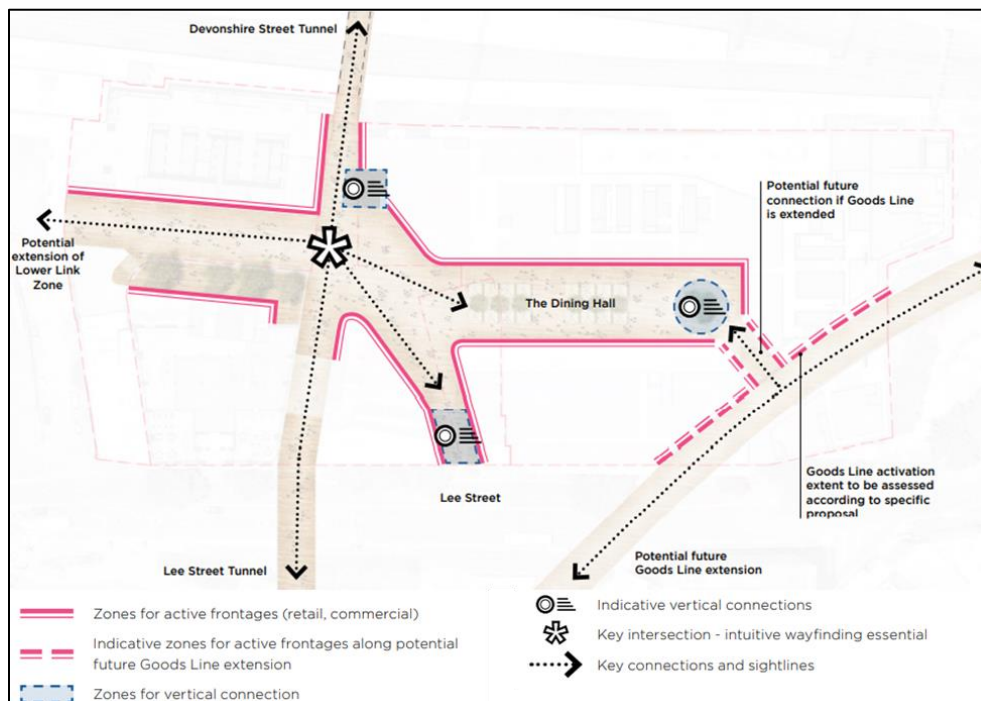
## 2 and 8a Lee Street, Haymarket 2 Strategic Context

**Figure 6: Key upper-level pedestrian movements within the Western Gateway Sub-Precinct**



Base image source: Western Gateway Sub-Precinct Publicly Accessible Space Strategy, Revision C, 22 June 2021

**Figure 7: Key lower-level pedestrian movements within the Western Gateway Sub-Precinct**



Base image source: Western Gateway Sub-Precinct Publicly Accessible Space Strategy, Revision C, 22 June 2021





## 3 Site and Transport Context

### 3.1 Site Context

The site is located within the City of Sydney Local Government Area (LGA). and situated 1.5 kilometres south of the Sydney CBD and 6.9 kilometres north-east of the Sydney International Airport within the suburb of Haymarket.

The site forms part of the Western Gateway sub-precinct, an area of approximately 1.65 hectares that is located immediately west of Central Station within Haymarket on the southern fringe of the Sydney CBD. Immediately north of Central Station is Belmore Park, to the west is Haymarket (including the University of Technology, Sydney and Chinatown), to the south and east is rail lines and services and Prince Alfred Park and to the east is Elizabeth Street and Surry Hills.

Central Station is a public landmark, heritage building, and the largest transport interchange in NSW. With regional and suburban train services, connections to light rail, bus networks and to Sydney Airport, the area around Central Station is one of the most-connected destinations in Australia.

The site is located at 2 & 8A Lee Street, Haymarket and is legally described as Lot 30 in Deposited Plan 880518, Lot 13 in Deposited Plan 1062447 and part of Lot 14 in Deposited Plan 1062447.

The land that comprises the site under the Proponent's control (either wholly or limited in either height or depth) comprises a total area of approximately 4,159 square metres.

The site currently comprises the following existing development:

- Lot 30 in Deposited Plan 880518 (Adina Hotel building): the north-western lot within the Western Gateway sub-precinct accommodates a heritage-listed building which was originally developed as the Parcels Post Office building. The building has been adaptively re-used and is currently occupied by the Adina Hotel Sydney Central. The eight-storey building provides 98 short-stay visitor apartments and studio rooms with ancillary facilities including a swimming pool and outdoor seating at the rear of the site.
- Lot 13 in Deposited Plan 1062447 and part of Lot 14 in Deposited Plan 1062447 (Henry Deane Plaza): the central lot within the Western Gateway sub-precinct adjoins Lot 30 to the south. It accommodates 22 specialty food and beverage, convenience retail and commercial service tenancies. The lot also includes publicly accessible space which is used for pop-up events and a pedestrian thoroughfare from Central Station via the Devonshire Street Tunnel. At the entrance to Devonshire Street Tunnel is a large public sculpture and a glazed structure covers the walkway leading into Railway Square. This area forms part of the busy pedestrian connection from Central Station to Railway Square and on to George and Pitt Streets, and pedestrian subways.

The site is listed as an item of local significance under Schedule 5 of the *Sydney Local Environmental Plan 2012* 'Former Parcels Post Office including retaining wall, early lamp post and building interior', Item 855.

The site is also included within the Central Railway Station State heritage listing. This is listed on the State Heritage Register 'Sydney Terminal and Central Railway Station Group', Item SHR 01255, and in Schedule 5 of the *Sydney Local Environmental Plan 2012* 'Central Railway Station group including buildings, station yard, viaducts and building interiors' Item 824.



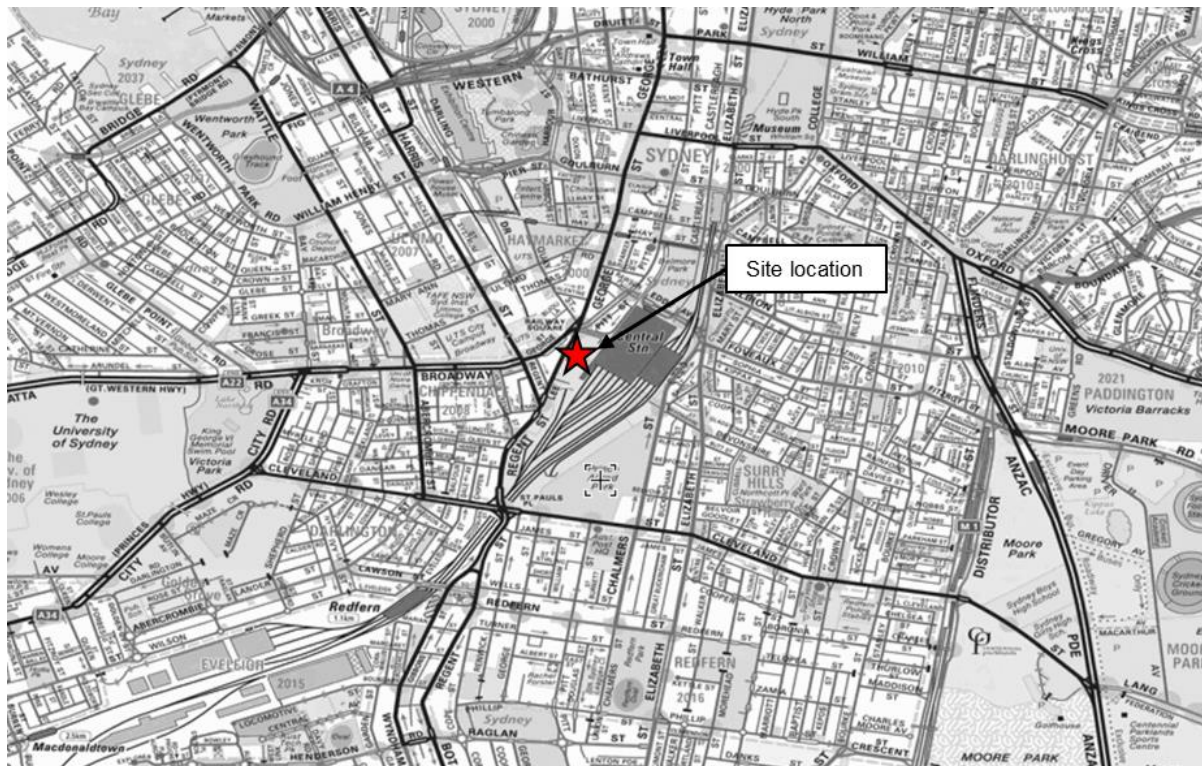
## 2 and 8a Lee Street, Haymarket

### 3 Site and Transport Context

The site is not however listed independently on the State Heritage Register. There is an array of built forms that constitute Central Station, however the Main Terminal Building (particularly the western frontage) and associated clocktower constitute key components in the visual setting of the Parcel Post building.

The location of the site and its surrounding environs is shown in Figure 8. The site identification and above ground lot boundaries and area plans are shown in Figure 9 and Figure 10, respectively.

**Figure 8: Site location and surrounds**



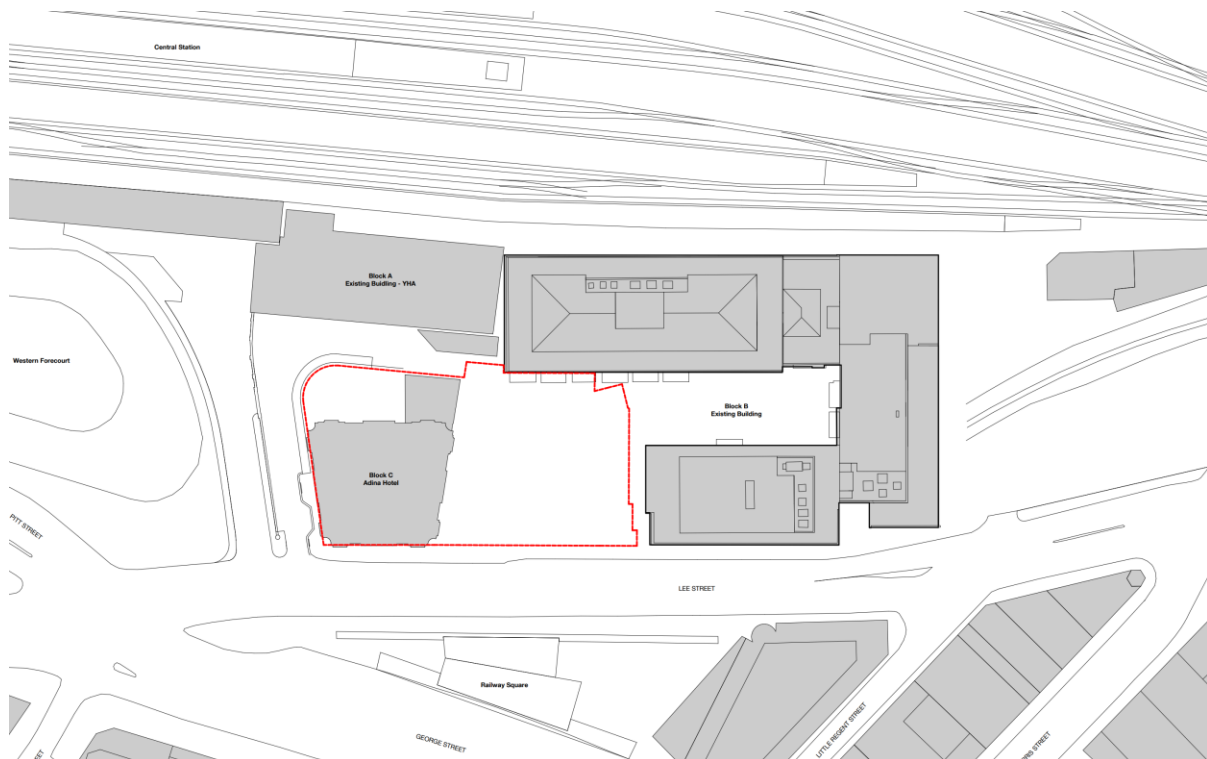
Basemap Source: Sydney



## 2 and 8a Lee Street, Haymarket

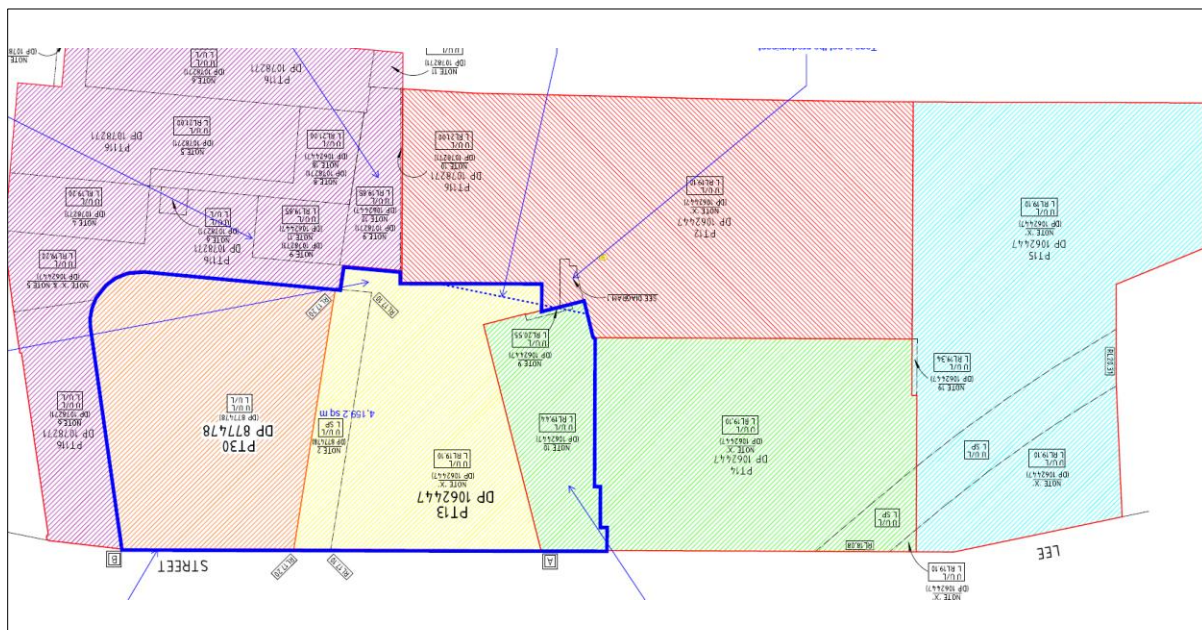
### 3 Site and Transport Context

**Figure 9: Existing site extent and immediate surrounds**



Source: Bates Smart, drawing no. BSMART-AR-DAD-01001000, rev. 1, dated 26 July 2022

**Figure 10: Above Ground Lot Boundaries and Area**



Source: Norton Survey Partners, reference 37908



## 3.2 Road Network

### 3.2.1 Road Hierarchy

Roads are classified according to the functions they perform. The main purpose of defining a road's functional class is to provide a basis for establishing the policies which guide the management of the road according to their intended service or qualities.

In terms of functional road classification, State roads are strategically important as they form the primary network used for the movement of people and goods between regions, and throughout the State. Transport for NSW (TfNSW) is responsible for funding, prioritising and carrying out works on State roads. State roads generally include roads classified as freeways, state highways, and main roads under the Roads Act 1993, and the regulation to manage the road system is stated in the Australian Road Rules.

TfNSW defines four levels in a typical functional road hierarchy, ranking from high mobility and low accessibility, to high accessibility and low mobility. These road classes are:

- Arterial Roads – Controlled by TfNSW, typically no limit in flow and designed to carry vehicles long distance between regional centres.
- Sub-Arterial Roads – Managed by either Council or TfNSW under a joint agreement. Typically, their operating capacity ranges between 10,000 and 20,000 vehicles per day, and their aim is to carry through traffic between specific areas in a sub region or provide connectivity from arterial road routes (regional links).
- Collector Roads – Provide connectivity between local sites and the sub-arterial road network, and typically carry between 2,000 and 10,000 vehicles per day.
- Local Roads – Provide direct access to properties and the collector road system and typically carry between 500 and 4,000 vehicles per day.

### 3.2.2 Surrounding Road Network

The surrounding road network is characterised by Lee Street, George Street and Ambulance Avenue which are summarised in Table 2.

**Table 2: Surrounding road network**

| Road          | Classification                               | Description   |
|---------------|--|---|
| Lee Street    | Sub-Arterial Road<br>(State Road)            | <ul style="list-style-type: none"><li>• Generally aligned in a north-south direction.</li><li>• Intersects with George Street, Pitt Street and Quay Street just north of the site.</li><li>• Two travel lanes in each direction, with a northbound bus lane for the bus interchange opposite the site.</li><li>• Approximate carriageway width of 16 metres.</li><li>• Posted speed limit of 40 kilometres per hour.</li><li>• Kerbside parking is not permitted near the site.</li></ul> |
| George Street | Arterial Road<br>(State Road/ Regional Road) | <ul style="list-style-type: none"><li>• Generally aligned in a north-south direction.</li><li>• Generally, four lanes including a bus lane in each direction southbound of Lee Street intersection.</li></ul>   |





## 2 and 8a Lee Street, Haymarket

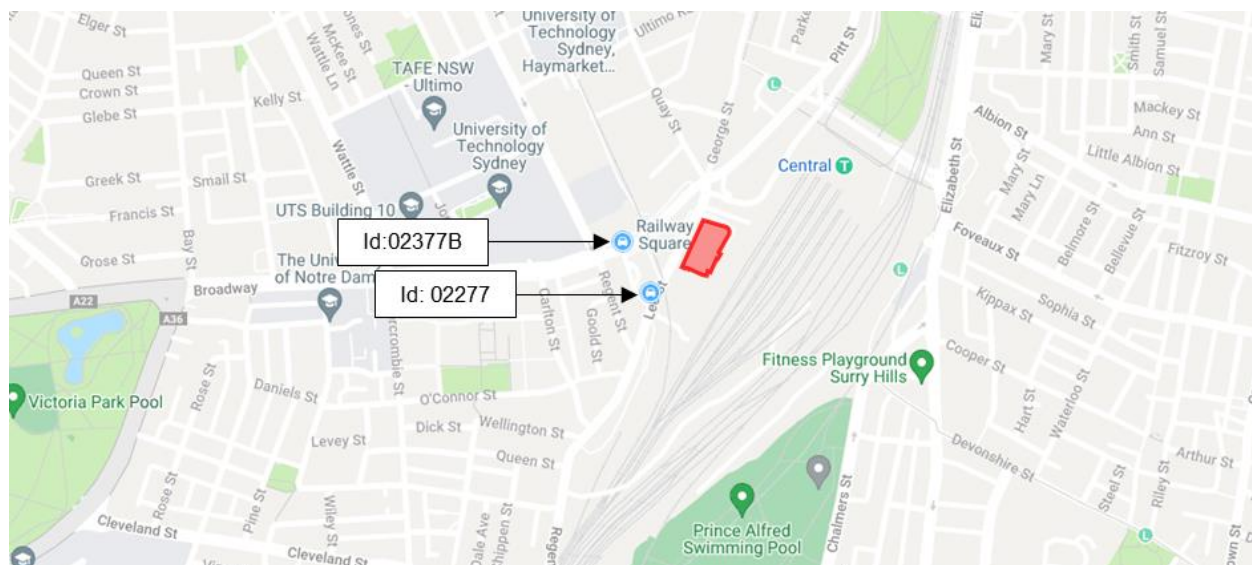
### 3 Site and Transport Context

|                  |            |  |
|------------------|------------|--|
|                  |            | <p>Northbound of the intersection transitions to two lanes in each direction.</p> <ul style="list-style-type: none"> <li>• Approximate carriageway width of 25 metres.</li> <li>• Posted speed limit of 40 kilometres per hour.</li> <li>• Includes two additional bus layover lanes at the interchange directly opposite the site.</li> <li>• Kerbside parking is not permitted near the site.</li> </ul> |
| Ambulance Avenue | Local Road | <ul style="list-style-type: none"> <li>• Aligned in an east-west direction.</li> <li>• Local accessway providing access to commercial buildings and loading areas.</li> <li>• One travel lane with restricted kerbside parking lane on each side.</li> <li>• Low speed zoning.</li> </ul>  |

### 3.2.3 Traffic Volumes

Traffic volume data has been accessed from the Transport for NSW Traffic Volume Viewer. Permanent traffic counter stations were located on Lee Street and George Street near the site, with northbound traffic data collected between 2017 and 2018 at both sites. The locations of the counters are illustrated in Figure 11 with details summarised in Table 3.

**Figure 11: Location of permanent traffic counter**



Base image source: Transport for NSW Traffic Volume Viewer

**Table 3: Traffic counter details**

| Station Id | Road          | Location                          | Year(s) of Data Collection      |
|------------|---------------|-----------------------------------|---------------------------------|
| 02377B     | George Street | 10m north of Little Regent Street | 2017, 2018<br>(both directions) |
| 02277      | Lee Street    | 30m north of Little Regent Street | 2017, 2018<br>(northbound only) |

The data indicates that George Street carried an Annual Average Daily Traffic Volume of about 35,000 vehicles (both directions) with Lee Street carrying about 11,200 vehicles (northbound only). The annual average weekday morning and evening peak hour traffic volumes are summarised in Table 4.



**Table 4: Weekday peak hour traffic volume data**

| Station       | Period                          | Direction  | Year of Data Collection | Avg. Weekday Peak Hour Vehicles |
|---------------|---------------------------------|------------|-------------------------|---------------------------------|
| George Street | AM peak hour<br>(8:00am-9:00am) | Northbound | 2017 & 2018             | 1,384                           |
|               |                                 | Southbound |                         | 699                             |
|               | PM peak hour<br>(5:00pm-6:00pm) | Northbound |                         | 1,309                           |
|               |                                 | Southbound |                         | 1,157                           |
| Lee Street    | AM peak hour<br>(8:00am-9:00am) | Northbound | 2017 & 2018             | 886                             |
|               | PM peak hour<br>(5:00pm-6:00pm) |            |                         | 693                             |

### 3.2.4 Existing Intersection Operation

The existing operation of the Lee Street/ Little Regent Street intersection was assessed as part of the *Fraser's Property Australia and Dexu's Funds Management Limited Western Gateway Sub-Precinct Proposal Block B Transport, Traffic, Pedestrian and Parking Report* (9 October 2019) prepared by Arup. Intersection modelling was completed using SIDRA INTERSECTION (SIDRA), a computer-based modelling package which calculates intersection performance.

The commonly used measure of intersection performance, as defined by the TfNSW, is vehicle delay. SIDRA determines the average delay that vehicles encounter and provides a measure of the level of service.

Table 5 shows the criteria that SIDRA adopts in assessing the level of service.

**Table 5: SIDRA level of service criteria**

| Level of service (LOS) | Average delay per vehicle (secs/veh) | Traffic signals, roundabout                                   | Give way & stop sign                      |
|------------------------|--------------------------------------|---|---|
| A                      | Less than 14                         | Good operation  | Good operation                            |
| B                      | 15 to 28                             | Good with acceptable delays and spare capacity                | Acceptable delays and spare capacity      |
| C                      | 29 to 42                             | Satisfactory  | Satisfactory, but accident study required |
| D                      | 43 to 56                             | Near capacity   | Near capacity, accident study required    |
| E                      | 57 to 70                             | At capacity, at signals incidents will cause excessive delays | At capacity, requires other control mode  |
| F                      | Greater than 70                      | Extra capacity required                                       | Extreme delay, major treatment required   |

Arup concluded that the existing intersection operates a LOS B during the modelled AM and PM peak hours. The results have been reproduced in Table 6.

## 2 and 8a Lee Street, Haymarket

### 3 Site and Transport Context

Table 6: Lee Street/ Regent Street SIDRA modelling results

| Peak Hour | Level of Service | Degree of Saturation | 95 <sup>th</sup> percentile queue (m) |
|-----------|------------------|----------------------|---------------------------------------|
| AM        | B                | 0.71                 | 87                                    |
| PM        | B                | 0.83                 | 98                                    |

Source: *Frasers Property Australia and Dexu Funds Management Limited Western Gateway Sub-Precinct Proposal Block B Transport, Traffic, Pedestrian and Parking Report* (9 October 2019) prepared by Arup.

## 3.3 Public Transport

The site is well serviced by high frequency and highly accessible public transport with Central Station, the key transport hub in Sydney located immediately to the east. The following sections consider the available transport, both present and in the future, located in close vicinity.

### 3.3.1 Heavy Rail

The site is located within the western precinct of Central Railway Station. Central Railway Station services all train lines within the Sydney Trains and NSW TrainLink networks and is a major terminus for suburban as well as interstate rail services. The rail network context is shown in Figure 12.

Figure 12: Surrounding rail network



## 2 and 8a Lee Street, Haymarket

### 3 Site and Transport Context

Source: Transport for NSW

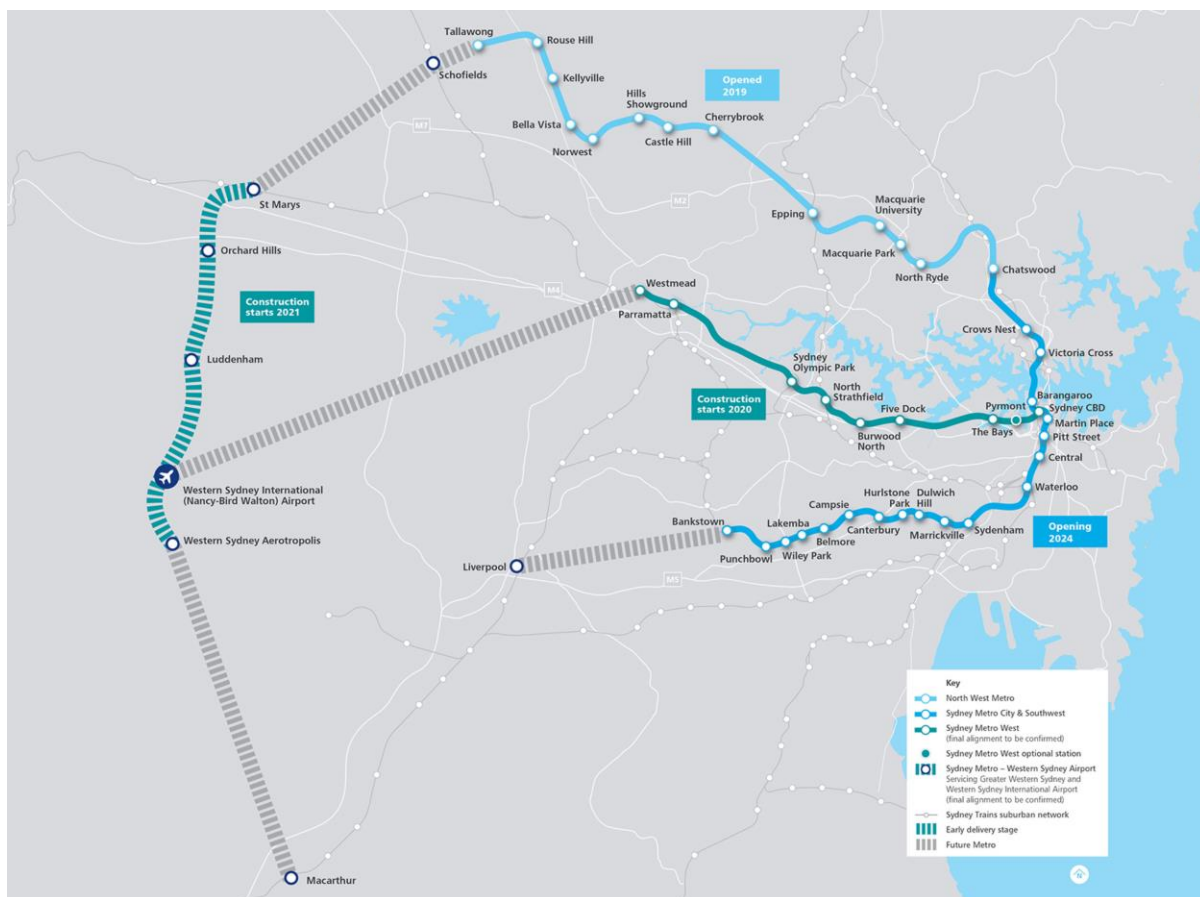
### 3.3.2 Sydney Metro

The NSW Government is delivering a new metro line from Chatswood to Bankstown travelling under Sydney Harbour and through Sydney CBD. It will be operational in 2024 with seven new metro stations, including at Central Railway Station, and eleven upgraded stations. Trains will run at least every four minutes in the peaks, equating to 15 trains per hour.

The new metro station at Central will significantly increase capacity on the public transport network to/from the area, further driving development and expansion in the area.

The metro network will be separated from the existing Sydney Trains network that continues beyond Bankstown. An overview of the future Sydney Metro network is shown in Figure 13

**Figure 13: Sydney Metro route alignments**



Source: Sydney Metro

The NSW Government also announced planning for Sydney Metro West with construction in full progress. This further expansion of Sydney's Metro network will significantly increase passenger travel by rail right across Sydney, aggressively reducing travel times and altering the perception of public transport generally.





## 2 and 8a Lee Street, Haymarket

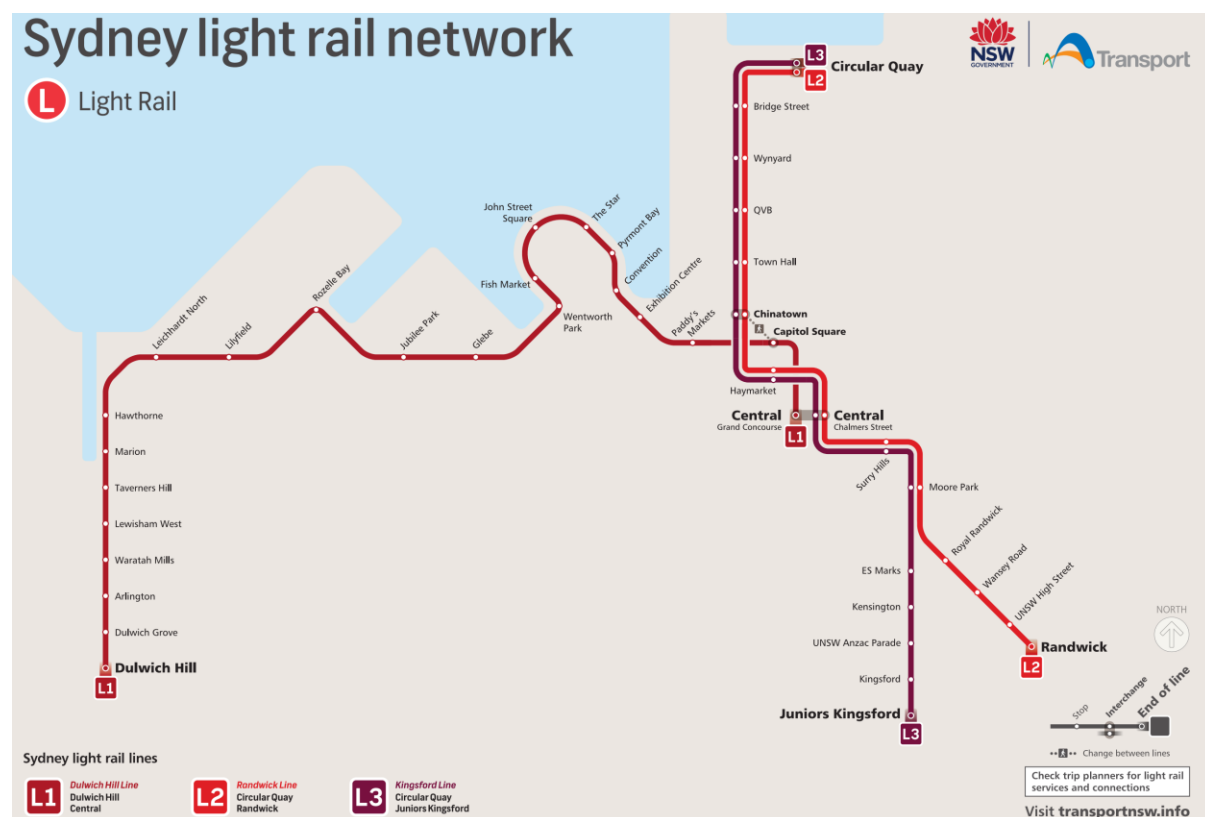
### 3 Site and Transport Context

The intended future Sydney Metro network will improve accessibility and travel times for workers, particularly to/ from Sydney CBD and Parramatta while creating opportunities for real change in travel behaviour for all users.

#### 3.3.3 Sydney Light Rail

The site is also within an easy walk of existing light rail stops at the northern end of Central. Running from Central, the L1 Dulwich Hill line connects the inner west with inner-city areas such as Darling Harbour and Ultimo. It has a frequency of 7.5 minutes during the day and 15 minutes at night. The recently completed L2 Randwick and L3 Kingsford lines connect Central and Sydney CBD with Randwick and Kingsford via Surry Hills and Moore Park with current frequency of 10 minutes during the day and 15 minutes at night. The existing light rail network is shown in Figure 14.

Figure 14: Sydney Light Rail network



Source: <https://transportnsw.info/sydney-lightrail-network-map> accessed May 2022

#### 3.3.4 Buses

The site is well served by high frequency and highly accessible bus services travelling on Parramatta Road/ Broadway and Harris Street, with services readily available from Railway Square adjacent to the site.

Railway Square bus terminal is shown in Figure 15 which services approximately 20 separate bus routes, all of which combine to provide a high level of accessibility to multiple destinations including Sydney CBD generally, Lower North Shore, Eastern Suburbs, Inner West and Sutherland Shire. The bus routes that serve the immediate area are shown in Figure 16.

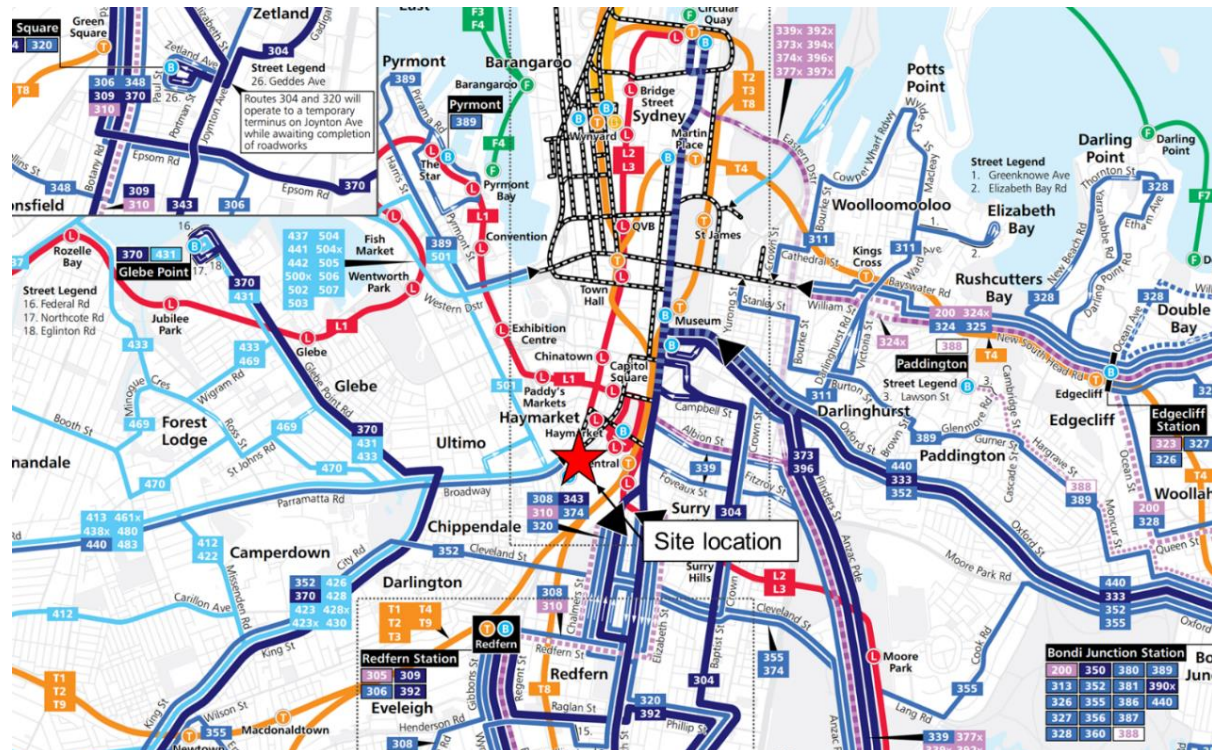


## 2 and 8a Lee Street, Haymarket 3 Site and Transport Context

Figure 15: Railway Square



Figure 16: Bus routes serving the subject site



Source: Transport for NSW – Eastern and south eastern suburbs (accessed April 2022)

## 3.4 Active Transport

### 3.4.1 Pedestrian Accessibility

Walking is the primary local area travel mode with Central naturally providing a high level of pedestrian amenity having played the key role in Sydney's transport network for so long. Generous footpaths are common throughout, with safe crossing facilities at multiple locations including mid-block on Lee Street and at all nearby signalised intersections.



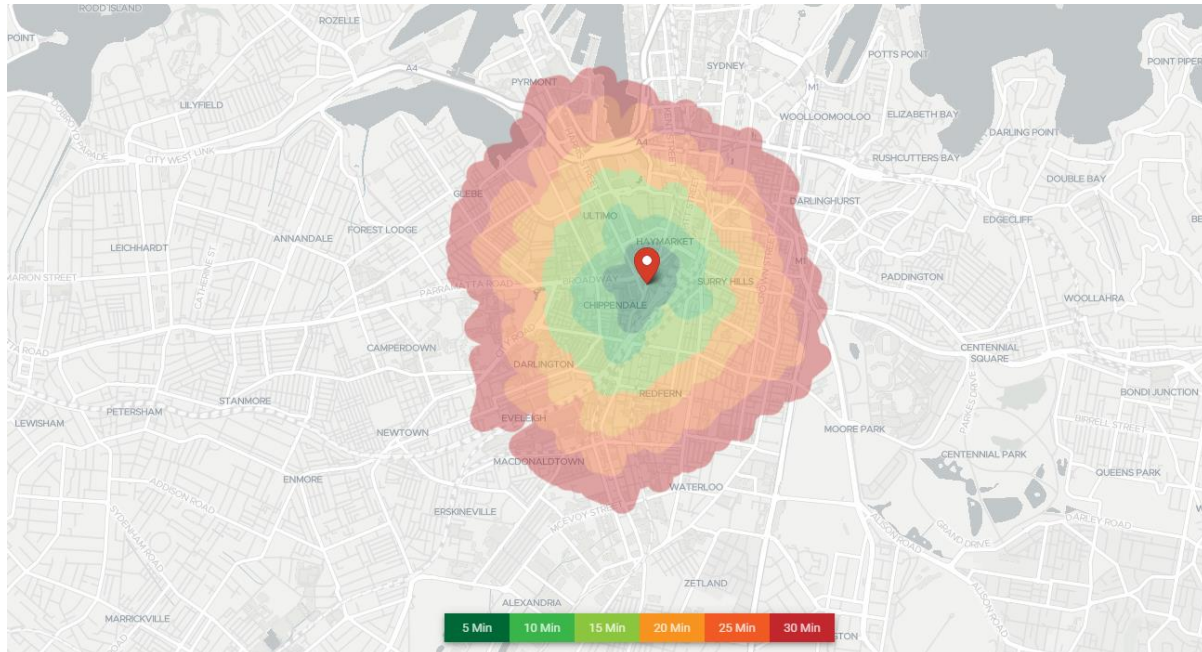
## 2 and 8a Lee Street, Haymarket

### 3 Site and Transport Context

A pedestrian tunnel underneath Lee Street connects the Railway Square bus terminal to Henry Deane Plaza. At the eastern end of the Plaza, pedestrians can use the Devonshire Tunnel which is a 300-metre-long passageway running beneath the rail corridor providing access to Central Station and connection to Surry Hills.

Figure 17 illustrates the walking catchment for the site and shows high level of connectivity throughout.

**Figure 17: Existing walking catchment**



Source: [app.targomo.com/](http://app.targomo.com/)

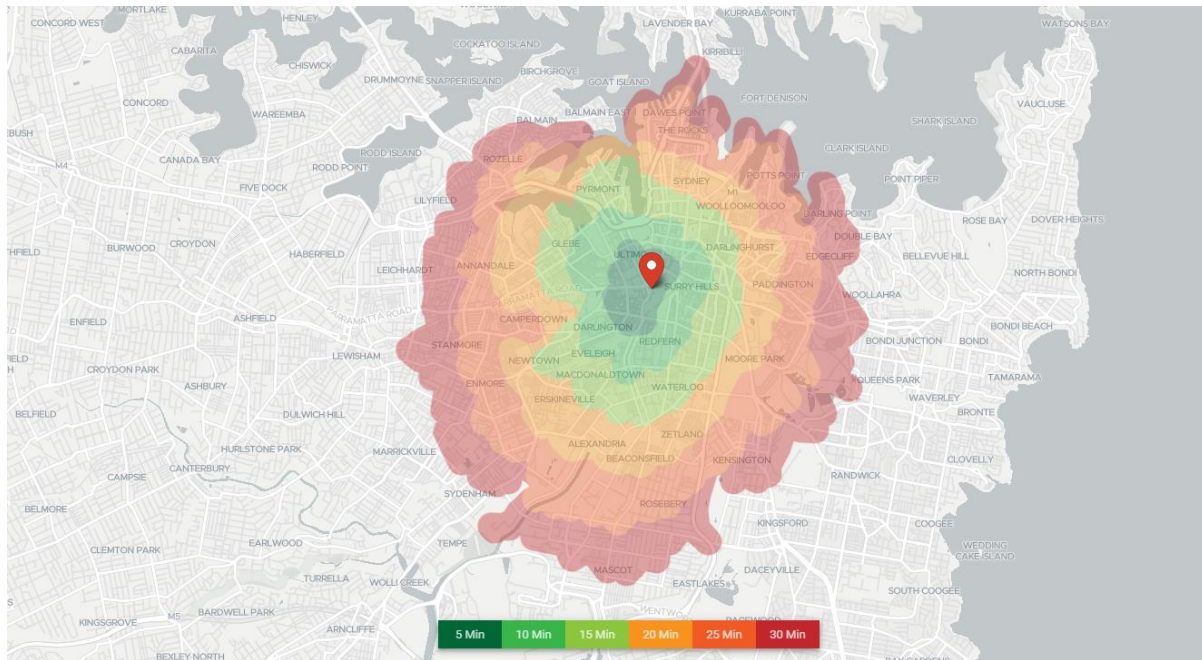
### 3.4.2 Cyclist Accessibility

Figure 18 highlights the catchment area for cyclists travelling to/ from the site and broader area. The streets near the site include a combination of shared zones and low traffic street with/ without bike lanes that are generally safe cycling routes as identified in Figure 19.



## 2 and 8a Lee Street, Haymarket 3 Site and Transport Context

Figure 18: Existing cycling catchment



Source: [app.targomo.com/](http://app.targomo.com/)

Figure 19: Cycling map



Source: City of Sydney accessed April 2022

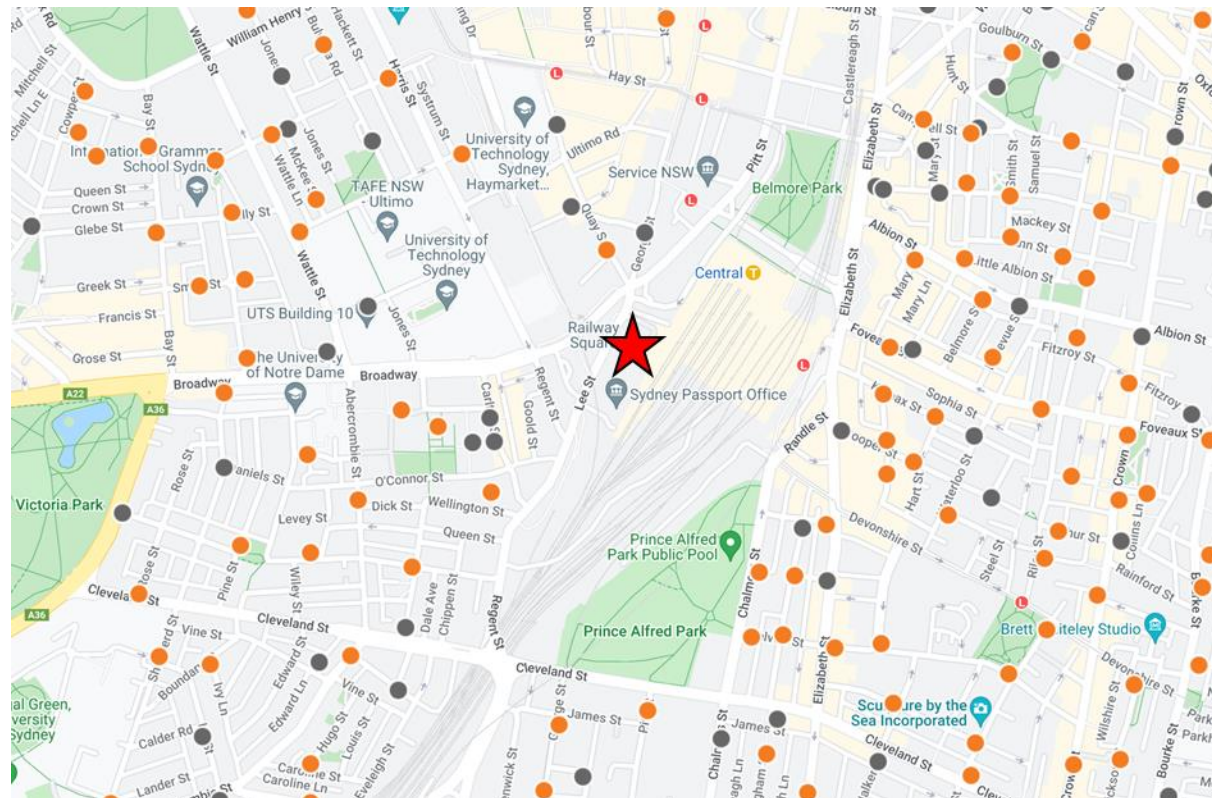


### 3.5 Car Share Initiatives

Car share schemes have become increasingly common throughout Sydney and are now recognised as a viable transport option for a range of trip purposes throughout Sydney, particularly shorter trips. Such facilities are likely to be of benefit to future commercial tenants at the site.

GoGet car share for example has a significant number of pods close to the site as shown Figure 20, with opportunities to provide further facilities as part of the precinct redevelopment to further limit travel by private car. Other providers like Flexicar and Car Next Door also offer services in the area.

**Figure 20: GoGet car share pods**



Source: GoGet website, accessed April 2022

## 4 Transport Appraisal

### 4.1 Access Strategy

#### 4.1.1 Overview

As discussed, the site is in a prime location providing staff and visitors doorstep access to a vast public transport network whether by bus, light rail or train (metro, suburban or interstate heavy rail). This establishes significant opportunities for development whilst keeping private vehicle trip reliance to a minimum.

The site (Block C) forms a key part of the future Central Precinct Western Gateway sub-precinct that includes the Central Place Sydney (CPS) commercial site (Block B) to the south and Atlassian YHA site (Block A) to the east, both also classified as SSD. The Atlassian SSD has been approved, and the CPS SSD is currently under assessment. To support such development within this location, industry leading design principles are paramount with access to, from and within the precinct being critical. This is especially important to ensure ease of access to all transport modes in an area that is envisaged to further become central to non-car travel.

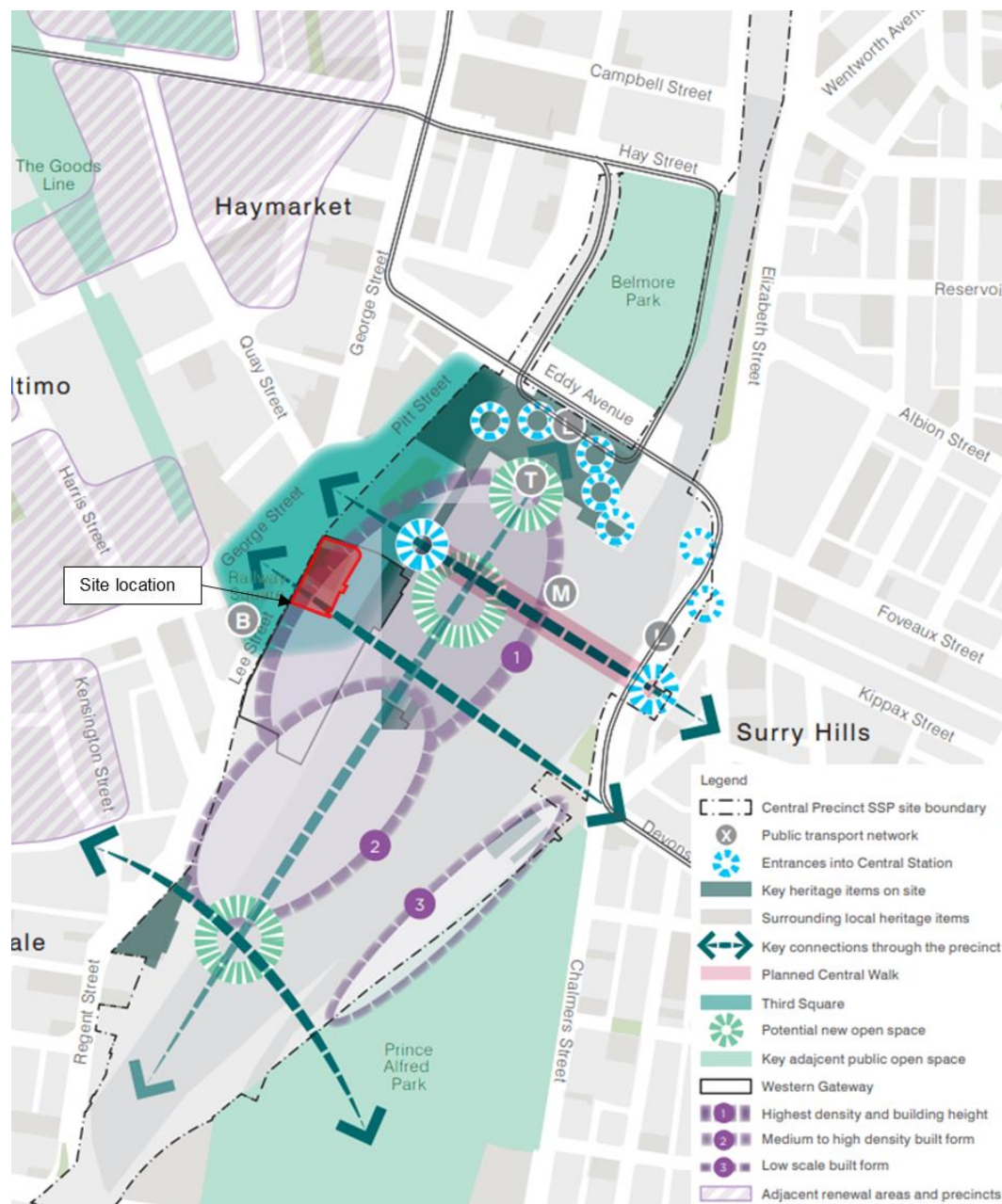
#### 4.1.2 Pedestrian Access and Movements

Figure 21 includes an extract from the Central Precinct Strategic Framework and the Bate Smarts Urban Design Report. They highlight the key principles for future pedestrian zones planned throughout the precinct and how they link back to Railway Square. This includes new connections with Central Station concourse and pedestrian tunnels to seamlessly incorporate two new grade separated connections between the Toga and Atlassian YHA sites. A future under platform connection to the north of the site ('Western Walk') will transform Ambulance Avenue into a pedestrianised corridor.

These extracts are indicative, with TfNSW to finalise a future Public Realm Strategy in coordination with the proponents (Atlassian, CPS and TOGA) and further coordinated development of the public realm design.



Figure 21: Indicative future pedestrian connections



Source: TfNSW, Central Precinct Strategic Framework, dated March 2021

The planned pedestrianisation of Ambulance Avenue and the north-south corridor east of the site will realise the level of amenity necessary to facilitate the increase in pedestrian activity in the future. Such pedestrian facilities would clearly benefit from distinct separation from vehicles, especially accounting for the anticipated future pedestrian volumes.

As discussed in Section 2.2.10, the *Western Gateway Sub-Precinct Publicly Accessible Space Strategy* provides a general framework for how the Sub-Precinct will promote pedestrian movement. The development includes public domain space across a lower and ground levels that provides clear and direct connections to public transport, commercial and retail businesses whilst embracing the design principles outlined in the strategy. The key pedestrian movements for the lower and ground levels are



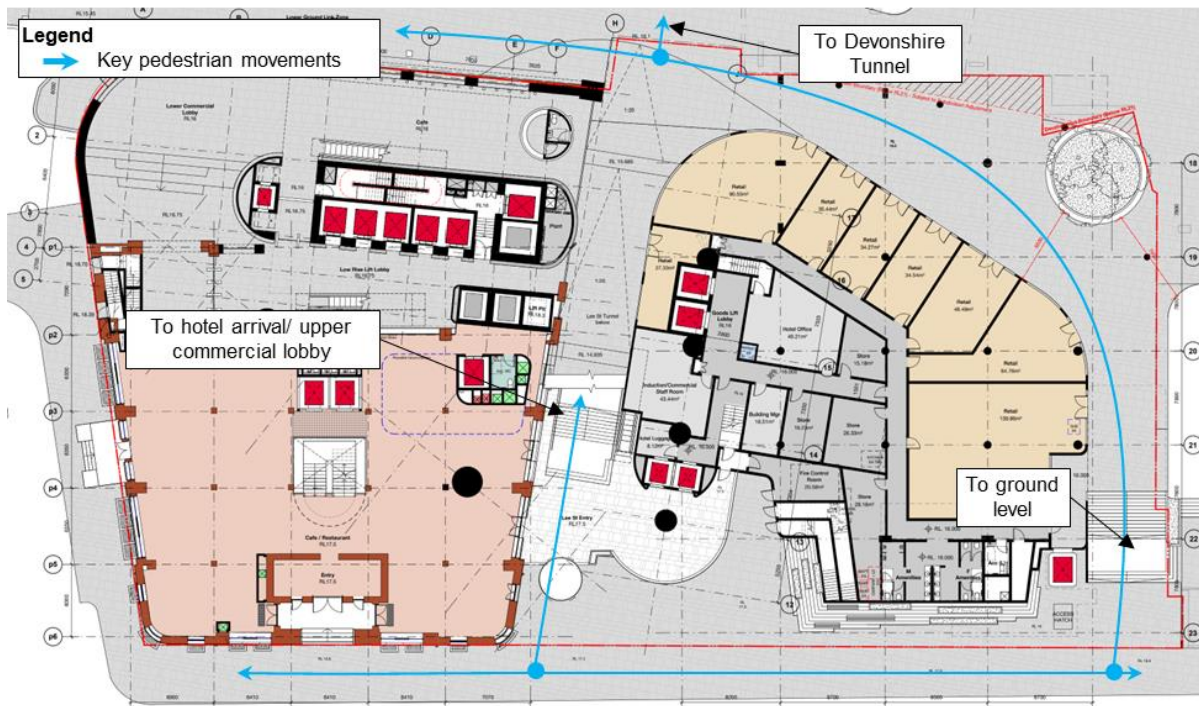


## 2 and 8a Lee Street, Haymarket

### 4 Transport Appraisal

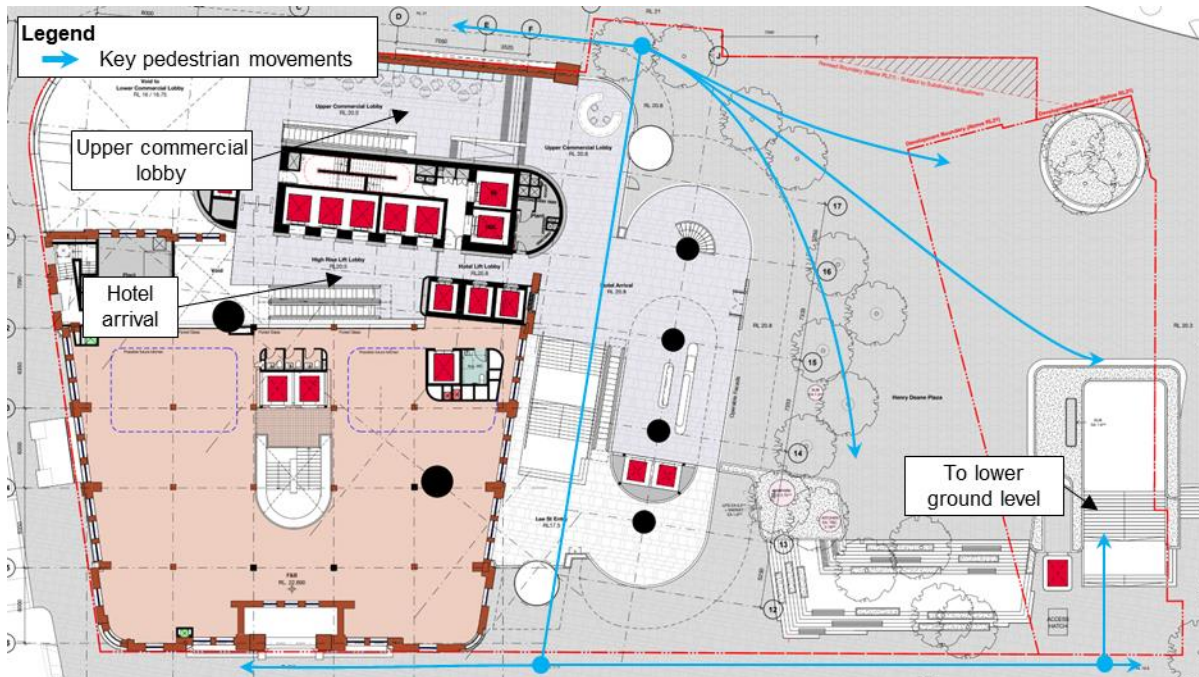
shown in Figure 22 and Figure 23 which closely resemble those outlined in the *Western Gateway Sub-Precinct Publicly Accessible Space Strategy* which was shown in Figure 6 and Figure 7 in Section 2.2.10.

**Figure 22: Proposed pedestrian movements lower ground level**



Base image source: Bates Smart, General Arrangement Plan, Lower Ground Level, 16 November 2022

**Figure 23: Proposed pedestrian movements ground level**



Source: Bates Smart, General Arrangement Plan, Ground Level, 16 November 2022



### **4.1.3 Vehicle Access and Loading**

Future vehicle access arrangements for the site and precinct generally remains critical with the proposal recognising the benefits of pedestrianizing Ambulance Avenue to facilitate the creation of Central Walk West.

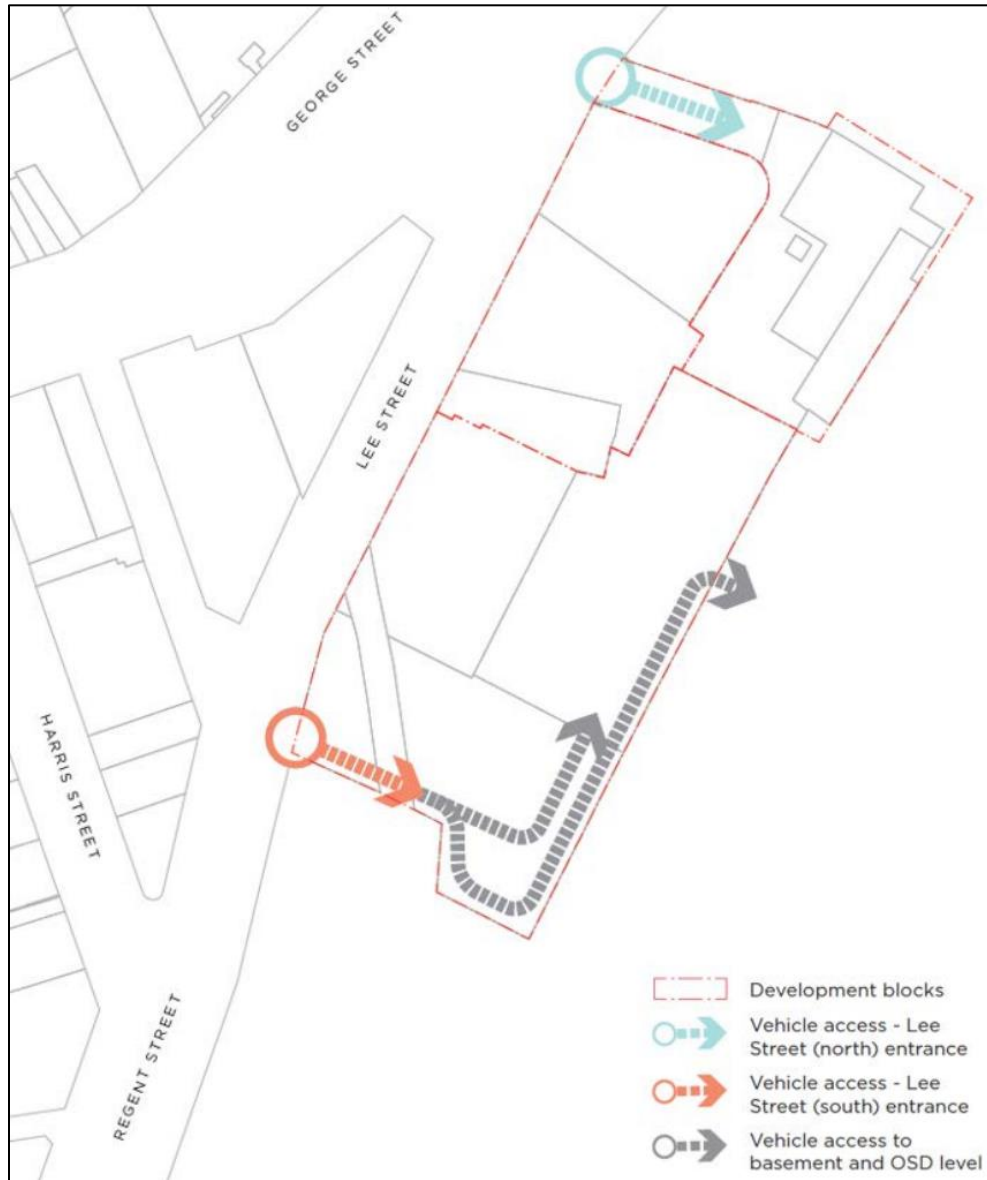
Given the heritage status of the existing building, alternative access arrangements are key to finding a balance between pedestrian amenity and practical site operations.

It is understood that a loading zone along the Lee Street site frontage has recently been approved following an application by Atlassian to be used throughout construction of the Atlassian building. The same area could practically be used for a range of set-down/ pick-up activity, including use by coaches associated with the site. Such provision would not materially affect southbound traffic on Lee Street. Ongoing stakeholder consultation will be key especially as part of future planning and recognising Lee Street potential as a future pedestrianised precinct. Given that coach activity associated with the site is anticipated to be low, agreement could be sought for coach drop-off and pick-up activity to occur on Pitt Street (between George Street and Eddy Avenue) within the “No Stopping – Authorised Buses Excepted 30-minute Limit” zone about 120 metres north of the site. The Western Forecourt fronting Central Station could also be practically used (in the event it is not redeveloped), and in agreement with relevant stakeholders.

More broadly, the precinct will best realise its full potential by integrating a high level of continuity throughout, including vehicle access to a consolidated basement via the adjacent CPS site to the south. Vehicles would remain on the southern periphery of the precinct, well removed from the highly pedestrianised areas.

While significant modifications are expected, the existing access is adjacent to the Lee Street/ Little Regent Street intersection and is expected to accommodate vehicles for the precinct. While the quantum of parking for all sites is limited, service vehicle access is important. The sub-precinct transport access strategy is shown in Figure 24 and the existing access to the south shown in Figure 25. Use of a well-coordinated consolidated access strategy for all three sites and surrounding land uses is critical to future daily operations. The consolidated basement and retaining access at the Lee Street/ Little Regent Street intersection aligns with the vision for the precinct outlined in the Western Gateway Sub-Precinct Design Guide.

Figure 24: Western Gateway transport access strategy



Source: Western Sydney Gateway Sub-Precinct

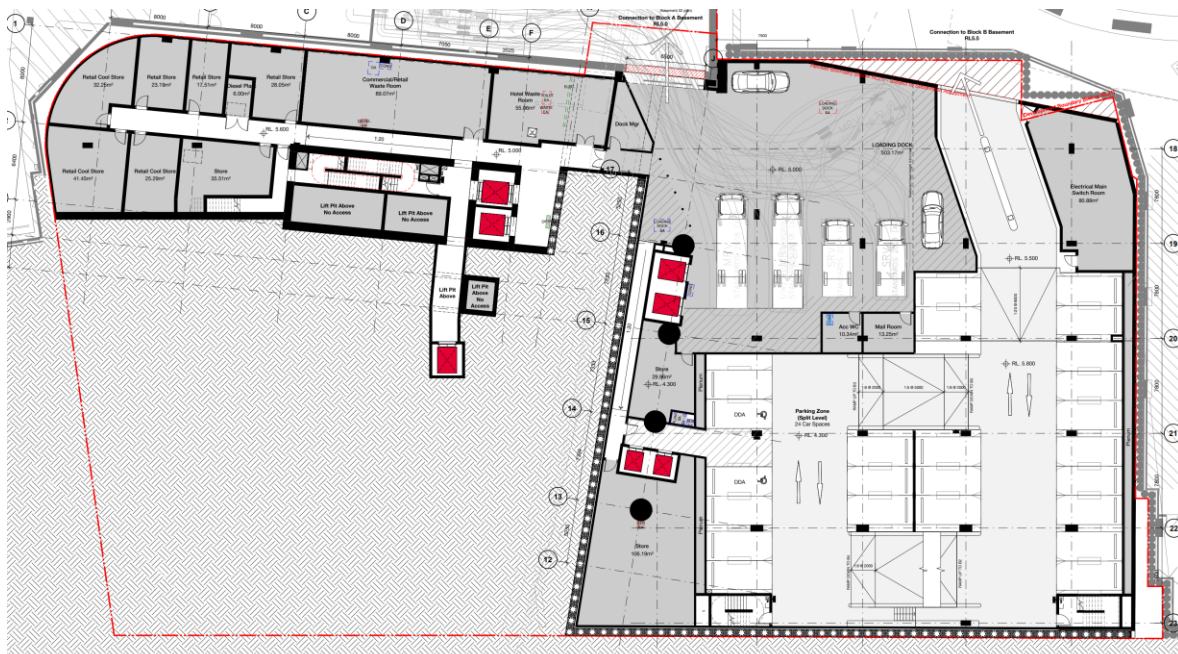


Figure 25: Lee Street southern access and Sydney Buses depot



The proposal incorporates separate basement car parking and loading dock. The loading dock would accommodate six service vehicles with all vehicles able to enter and exit in a forward direction via the Atlassian (and CPS) basements. The proposed basement level 3 layout (that includes the loading dock) is shown in Figure 26.

Figure 26: Proposed basement level 3



Base source: Bates Smart, project number S12550, drawing no. BSMART-AR-DAD-10B03000, rev. 1, 16 November 2022

## 2 and 8a Lee Street, Haymarket

### 4 Transport Appraisal

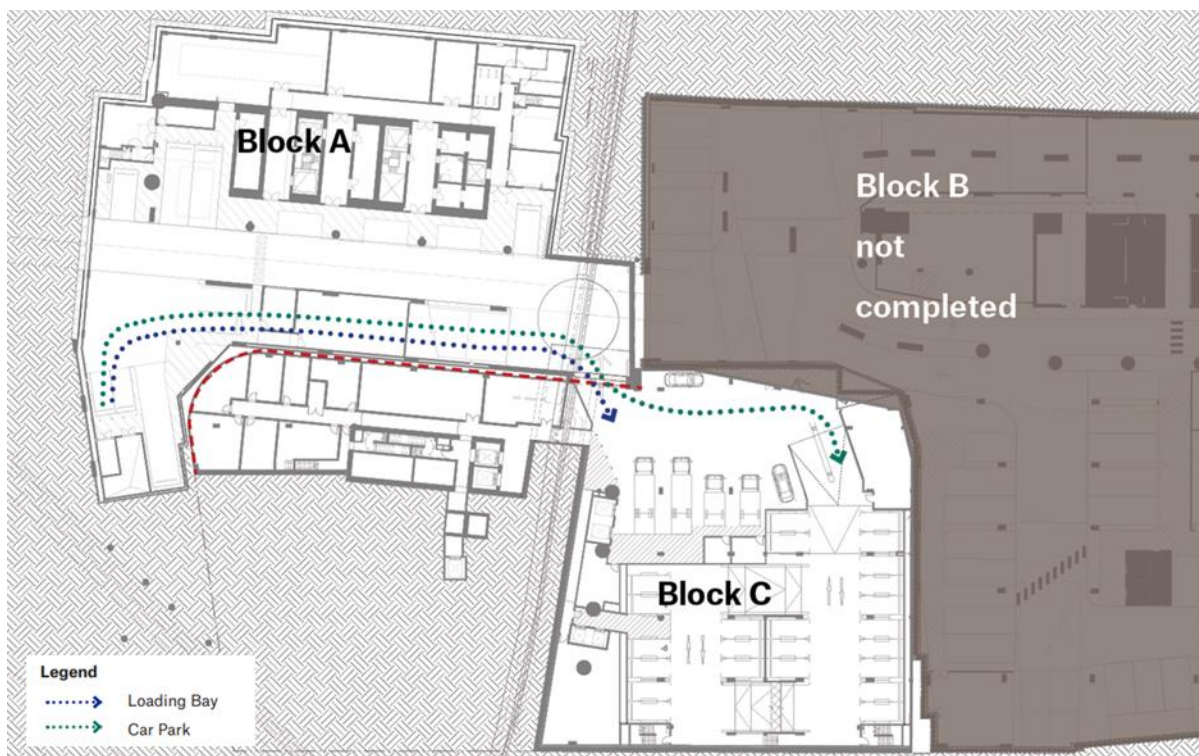
The basement car park is proposed across three split levels to achieve a maximum 106 parking spaces and four car share spaces. The layout and circulation are suitable for the anticipated volumes with boom gates and/ or security roller shutters to provide the necessary level of security. The basement car park will provide appropriate systems, infrastructure and space allocation for the installation of electric vehicle charging facilities. Electric vehicle infrastructure will be provided to support the future provision of EV charging of up to 50 per cent of commercial parking spaces. Level two or higher chargers will be fitted to all car share bays.

Ultimately, the loading dock and car park has been designed with access via the Atlassian and CPS basements in the end state design as part of the consolidated access strategy, with interim access arrangements also developed to ensure feasible access under any development scenario.

The interim arrangement has been developed in conjunction with Atlassian, with vehicle access aligned with the existing Upper Carriage Lane that transitions up from Lee Street. This interim arrangement will be removed (or not implemented at all) once the CPS site is redeveloped to allow for the ultimate consolidated access strategy via the Lee Street precinct access driveway to the south.

The interim site access arrangements, for the purposes of car park and loading dock access is shown in Figure 27. An internal ramp connecting the loading dock and car park will facilitate light vehicle access to/ from the car park via the loading dock. This will ultimately be closed once precinct access is available via the CPS site to the south. The interim and end state site access on-site arrangements are discussed further in Section 6 (and shown in Figure 33).

**Figure 27: Interim (Day 1) service vehicle and car park access arrangements**



Source: Bates Smart, TOGA Central – response to submission, 25 November 2022

The provision of suitable set-down/ pick-up facilities for the development and broader sub-precinct is important. As discussed, opportunity for on-street facilities on Lee Street adjacent to the site remain feasible and were included as part of the approved Atlassian development.

The Central Sydney Planning Strategy identifying the potential removal of buses from Lee Street and consolidation of routes onto Broadway-George Street present an opportunity to provide a kerbside or indented set-down/ pick-up facilities.

## 4.2 Anticipated Travel Behaviour

To understand travel behaviour of existing workers in the area, Journey to Work (JTW) 2016 data from the Australian Bureau of Statistics (ABS) for Haymarket and surrounds has been analysed. Table 7 shows worker mode share for the area that covers the site. Given the prime location of the site to high frequency public transport services and the low parking provisions, mode share targets have been developed for travel behaviour associated with the future population of the proposal.

**Table 7: 2016 travel mode share analysis**

| Mode of Travel         | 2016 ABS (Sydney, Haymarket & The Rocks) | Targets     |
|------------------------|--|-------------|
| Train                  | 53.4%                                    | 58%         |
| Bus                    | 20.4%                                    | 20%         |
| Ferry                  | 2.5%                                     | 1%          |
| Light Rail             | 0.6%                                     | 2.5%        |
| Vehicle (as driver)    | 11.8%                                    | 3.5%        |
| Vehicle (as passenger) | 2.6%                                     | 2.5%        |
| Motorcycle             | 0.9%                                     | 1%          |
| Bicycle                | 1.4%                                     | 3%          |
| Walking                | 6%                                       | 8%          |
| Other                  | 0.4%                                     | 0.5%        |
| <b>Total</b>           | <b>100%</b>                              | <b>100%</b> |

Table 7 shows a target for about 58 per cent of worker trips to the development to be by train and 20 per cent by bus. Light rail travel is expected to also increase to 2.5 per cent. Worker trips by car (as driver) are targeted to account for 3.5 per cent and trips by car (as passenger) 2.5 per cent. Up to about 11 per cent of worker trips are anticipated to be by active means (walking or cycling) and is practically ambitious on account of the proposed land uses and associated end of trip facilities.

These travel modes reflect the changing heavy rail and metro rail services coming to Central and Sydney more broadly, together with light rail services. It also reflects the high-quality end of trip facilities and bicycle parking proposed as part of development and broader precinct. Overall, the targets are generally consistent with the JTW data for the area, with a realistic and achievable shift towards higher proportional

travel by train and active travel means, and fewer private vehicle trips that accurately reflect the prime site location close to Central together with limited on-site parking.

It is also important to consider the daily operation of the future site especially with the inclusion of the 204-room hotel. Hotels generate different travel mode shares when compared with commercial buildings, with a need for some on-site parking provision and facilities to allow for drop off/ pick up activity (uber, taxi, intermittent coach). Hence, the target mode share differs slightly from the other commercial buildings that make up the precinct.

### 4.3 Car and Motorcycle Parking

Parking rates relevant to the proposed land uses are detailed in City of Sydney LEP 2012 and DCP 2012. The rates outline the maximum allowable number of car parking spaces within the development, rounded to the nearest whole number. Minimum rates are not provided in either the City of Sydney LEP 2012 or DCP 2012.

The site is within the “Category A” (Land use and transport integration) and “Category D” (Public transport accessibility level) areas which has the lowest maximum allowances within the City of Sydney LGA. The maximum allowable car parking provisions for the proposed development are summarised in Table 8.

**Table 8: Car parking provision**

| Land Use           | Area                 | Rate            | Maximum Requirements |
|--------------------|----------------------|-----------------|----------------------|
| Office             | 29,228m <sup>2</sup> | See below [1]   | 56                   |
| Hotel              | 204 keys             | 1 per 5 keys    | 41                   |
| Retail             | 4,511m <sup>2</sup>  | See below [2]   | 9                    |
| <b>Total</b>       |                      |                 | <b>106</b>           |
| Accessible Parking |                      | 1 per 20 spaces | 5                    |
| Motorcycle Parking |                      | 1 per 12 spaces | 9                    |
| Car Share          |                      | 1 per 30 spaces | 4                    |

[1] Max office parking = (Office GFA x Site Area) / (50 x Total GFA of Site) = (29,228\*4,159) / (50\*43,000) = 56.5 (rounded to 56)

[2] Max retail parking = (Retail GFA x Site Area) / (50 x Total GFA of Site) = (4,511\*4,159) / (50\*43,000) = 8.7 (rounded to 9)

Table 8 indicates that the proposal could provide the following:

- 106 car spaces (maximum requirement)
- five accessible car spaces (included within the maximum requirement)
- four car share spaces
- nine motorcycle spaces.

The proposal generates a maximum parking requirement of 106 parking spaces (including five accessible spaces) plus four car share spaces and nine motorcycle spaces. The architectural plans indicate that 106 parking spaces (including seven accessible spaces), four car share spaces and nine motorcycle spaces can be accommodated in a consolidated basement. In this regard, the proposed quantum and breakdown of parking is compliant with City of Sydney LEP 2012 for category D land.

Electric vehicle infrastructure will also be provided to support the future provision of EV charging of up to 50 per cent of commercial parking spaces. Level two or higher chargers will be fitted to all car share bays.





## 4.4 Bicycle parking and associated facilities

The Western Gateway Design Guide states that end of trip facilities are to be sufficient in scale and appropriately located for the end users (i.e. staff and visitors). The design guide does not provide specific guidance for provision of bicycle parking or showers and as such DCP 2012 has been referenced as a guide to assess the adequacy of the proposed bicycle parking and end of trip facilities for the development. In this regard, Table 9 outlines the DCP 2012 requirements as it relates to the proposal.

**Table 9: DCP 2012 bicycle provisions**

| Land Use                         | Area                                 | Rate  | Requirements |
|----------------------------------|--------------------------------------|---|--------------|
| Office                           | 29,228m <sup>2</sup>                 | Staff (1 per 150sqm)<br>Visitor (1 per 400sqm)                      | 195<br>73    |
| Hotel                            | 40 staff (max. rostered)<br>204 keys | Staff (1 per 4 staff)<br>Visitor (1 per 20 keys)                    | 10<br>10     |
| Retail                           | 4,511m <sup>2</sup>                  | Staff (1 per 250sqm)<br>Visitor (2 plus 1 per 100sqm over 100sqm)   | 18<br>46     |
| <b>Total (Staff – Class 2)</b>   |                                      |   | <b>223</b>   |
| <b>Total (Visitor – Class 3)</b> |                                      |   | <b>130</b>   |
| Lockers                          |                                      | 1 per bicycle space<br>(for staff use)                              | <b>223</b>   |
| Showers and change rooms         |                                      | 3 plus 2 per 20 bicycle<br>spaces over 20 spaces<br>(for staff use) | <b>23</b>    |

Table 9 indicates that the following bicycle parking requirements when based on DCP 2012 requirements:

- 223 bicycle spaces for staff in secure locations
- 130 bicycle spaces for visitors in publicly accessible locations
- 223 lockers and 23 showers and change room facilities for use by staff.

While relevant, such provision does not consider the sites location immediately adjacent to the largest and busiest rail interchange where there is a heavy reliance on travel by train and bus, and future metro services. The public domain also needs to be functional across the broader precinct, with the total provision of visitor bicycle parking coordinated across all three sites to ensure equitable provision and use without detracting from the public domain space. Heavy pedestrian movements have and will continue to also need to be accommodated throughout. With about 80 per cent of most workers and visitors travelling by public transport and with current mode share confirming an approximate two per cent bicycle mode share (based on JTW data, discussed in Section 4.2) a theoretical building population of 3,449 people (as discussed further in Section 4.8.1) will generate a practical demand for 69 bicycle spaces.

Secure bicycle parking and end of trip facilities for use by staff and tenants are provided on-site and within basement level 1 and basement level 2. Appropriate vertical connections will be by way of lifts, ramp and/ or stairs with bicycle rail to ensure a high level of convenient user access to and from the ground level. Cyclists entering from Lee Street would travel down a small staircase (with wheel gutter

provided) and use the goods lifts to access the end of trip facilities (each goods lift has capacity for up to two bicycles). Staff/ tenants would also be able to use the passenger lifts to access the end of trip facilities. Bicycle parking for visitors is proposed as part of the surrounding public domain in locations with an abundance of passive and active surveillance.

Overall, the proposed 223 staff bicycle spaces are in accordance with the DCP requirement and complimented by 72 visitor bicycle spaces incorporated into the public domain. The total overall bicycle parking amounts to 295 spaces. 223 lockers are also proposed as part of the end of trip facilities and 28 showers would be provided exceeding the DCP requirement of 23 showers. Hotel staff will be provided with additional separate end of trip facilities as part of hotel facilities.

With a total provision of 295 bicycle spaces, this would represent a mode share of about nine per cent based on a projected building population of 3,449 people, or a seven per cent increase on the existing mode share for the site (based on JTW data). It is noted that the future bicycle mode share target outlined in Table 7 is three per cent, which represents over a 100 per cent increase on current mode share and would generate a practical demand of about 104 spaces based on the expected future building population. The 295 bicycle spaces proposed would therefore further allow for any increase in bicycle usage positively influenced by future precinct green travel initiatives or as residential development continues to increase in and around Sydney CBD.

Whilst it is recognised that visitor bicycle parking falls marginally short of the DCP requirement, it is also important to ensure that the public domain is coordinated within the surrounding precinct and that the bicycle racks

1. strike a positive balance between delivering a quality and functional public domain
2. recognise the sites' location adjacent to Central Station where most users will travel by public transport daily
3. be consistent with known active and travel demand in the area.

The adjacent Atlassian and CPS sites will also provide bicycle parking as part of the public domain, proposing approximately 30<sup>1</sup> and 400<sup>2</sup> visitor spaces respectively. On this basis, the precinct will provide around 500 visitor bicycle spaces that collectively will more than appropriately meet any current and future demand in the precinct.

Bicycle parking is well located throughout the public domain and of a quantum that reflects the known and likely future travel mode share in and around Sydney CBD. It does not represent and oversupply and achieves a sustainable balance between the need for visitor bicycle parking and retaining the broader intent of the precinct public domain.

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<sup>1</sup> JMT Consulting, *Atlassian Central Station Transport Impact Assessment*, dated 27 November 2020

<sup>2</sup> ARUP, *Western Gateway Sub-Precinct Proposal: Block B, 14-30 Haymarket, NSW, 2000*, dated 9 October 2019



## 4.5 Loading and servicing

### 4.5.1 City of Sydney DCP

The City of Sydney Development Control Plan 2012 (DCP 2012) provides requirements for service vehicle parking for various land-uses. Table 10 provides an assessment of minimum requirements as they relate to the proposal.

**Table 10: City of Sydney DCP loading requirements**

| Land-use     | Size                 | Rate   | Loading requirement              |
|--------------|----------------------|--|----------------------------------|
| Office space | 29,228m <sup>2</sup> | 1 space per 3,300sqm or part thereof, for the first 50,000sqm  | 9                                |
| Hotel        | 204 rooms            | 1 space per 50 hotel rooms, or part thereof, up to 100 bedrooms; then<br>1 space per 100 hotel bedrooms, plus<br>1 space per 400sqm of reception, lounge, bar and restaurant area GFA, or part thereof, for the first 2,000sqm; then<br>1 space per 8,000sqm of reception, lounge, bar and restaurant area GFA thereafter. | 4<br>(based on hotel rooms only) |
| Retail space | 4,511m <sup>2</sup>  | 1 space per 350sqm GFA, or part thereof, up to 2,000sqm; then<br>1 space per 800sqm GFA thereafter.  | 9                                |

Based on DCP 2012, the proposed development is required to provide up to 22 loading spaces.

It is however noted that the loading requirements as set in DCP 2012 are broadly interpreted to be an oversupply for any one land use and does not consider efficiencies associated with more than one land use. It is also slightly higher than the equally conservative TfNSW Guidelines, which if applied would require 18 loading spaces.

Both statutory requirements also don't consider the operational benefits associated with loading dock management systems, which have vastly improved and expanded since publication of the DCP in 2012. City of Sydney also actively engages with such providers and itself recognises the benefits of such efficiencies to reduce the spatial requirements associated with onerous loading dock provision, especially in CBD locations. Online booking systems (such as MobileDock) have been implemented to effectively manage complex logistical requirements of some of the largest CBD precincts around the world. Such systems allow service vehicles to be booked to controlled and defined timeslots throughout the day and permit defined duration of stay. Real time data can also be provided to drivers should delays occur.

As such, a first principles assessment based on the expected loading demands of the site is more appropriate for this type of land use in this location. Such an approach is routinely considered by stakeholders to be a more robust assessment and one that is better positioned to accurately reflect current (and changing) loading dock provision and efficiency.

### 4.5.2 Office

Loading docks play an important role for the function of most commercial spaces. In the case of office space, it is typically acknowledged that one loading space for every 10,000 to 15,000 square metres of



GFA is appropriate. This approach is consistent with TfNSW data. Table 11 highlights the few examples with comparable commercial space located in North Sydney, Sydney Olympic Park and Parramatta.

**Table 11: TfNSW data for similar commercial buildings in Sydney**

|                            | North Sydney         | Sydney Olympic Park  | Parramatta           | Average |
|----------------------------|----------------------|----------------------|----------------------|---------|
| Size (GFA)                 | 31,400m <sup>2</sup> | 34,131m <sup>2</sup> | 27,000m <sup>2</sup> | 30,844  |
| Loading bays               | 1                    | 7                    | 3                    | 3.7     |
| Loading bays per 10,000sqm | 0.3                  | 2.0                  | 1.1                  | 1.1     |

Based on the above, with the proposed 29,228 square metres of office space, access to two to three loading bays would be sufficient to cater for the demands of the commercial floor space. Much of the demand is also associated with couriers, small deliveries, and maintenance vehicles mostly in the form of vans and utes and waste collection vehicles. Larger less frequent deliveries are by small rigid vehicles (SRVs) and medium rigid vehicles (MRVs).

#### **4.5.3 Hotel**

Hotel loading activity is heavily reliant on deliveries with the various daily needs such as laundry services, and other ad-hoc deliveries, and maintenance vehicles.

Drawing on Stantec's own database and experience with previous projects with similar land uses and location, the hotel is expected to have demand from waste collection vehicles, SRV and MRV deliveries and smaller delivery/ maintenance vehicles, with an expected demand profile of about five to seven vehicles per day.

With duration of stay mostly limited and managed to be 20 to 30 minutes in CBD loading docks, a single loading bay could accommodate two to three service vehicles per hour. Assuming consistent demand across a 12-hour period per day and with dock management in place, this equates to one loading bay accommodating between 24 and 36 vehicles per day. Based on this, the hotel would need shared use of one loading bay.

#### **4.5.4 Retail and Food and Beverage**

Loading requirements for the retail and food and beverage (F&B) space are typically influenced by the number of tenancies and their individual needs. Drawing on Stantec's database and experience with similar projects/ sites, a general rule is 1.1 deliveries per day for each general retail tenancy while larger tenancies generate demand for up to 3.1 deliveries per day (which includes standard allowances for waste collection).

With the plans indicating nine retail/ F&B tenancies on the lower ground floor and a single F&B tenancy on the ground floor, the loading demands for these uses are expected to be up to 16 vehicles per day. Conservatively applying a 50 per cent contingency (resulting in about 24 vehicles per day), and application of the same factors detailed above, this equates to dedicated retail tenant use of one loading bay.

### **4.5.5 Summary**

Based on the above, the following loading requirements are recommended for each of the proposed land uses:

- Office: two to three loading bays for vehicles up to MRVs.
- Hotel: use of one loading bay for vehicles up to MRVs.
- Retail/ F&B: one loading bay for vehicles up to MRVs.

Overall, the proposal is thought to require use of a minimum five on-site loading bays to service all land uses and associated waste collection needs. The proposal exceeds this empirical requirement with provision of six loading bays. Two of these would accommodate all vehicles up to MRVs, two for use by smaller vehicles up to SRVs, and two for smaller vans and utes. Conservatively estimating that each bay can accommodate 25 vehicles per day (as detailed above), six loading bays could theoretically facilitate 150 service vehicles daily based on an average 20-to-30-minute stay and 12-hour operational period. Peak period fluctuations in demand are also common.

This loading provision is appropriate and able to service the anticipated daily and peak loading demands. Waste collection is also typically completed outside peak and operating periods and therefore does not materially contribute to additional loading demand. A detailed loading dock management plan should be implemented with an online booking system also able to ensure appropriate use across the day and week. It is broadly accepted that loading dock management systems can improve efficiency by 30 to 50 per cent. The efficiency of such loading dock management systems is discussed further in Section 6.

Toga has engaged extensively with CPS and discussed access opportunities and the overarching need for all sites to ultimately access the precinct via a single access at the southern end. Traffic volumes, including service vehicle activity was communicated with overall volumes not materially changing the function of the consolidated access driveway. The delivery demands (and car park demand) of the Toga Central site will be low when compared with those estimated as part of CPS.

## **4.6 Coach and set-down/ pick-up facilities**

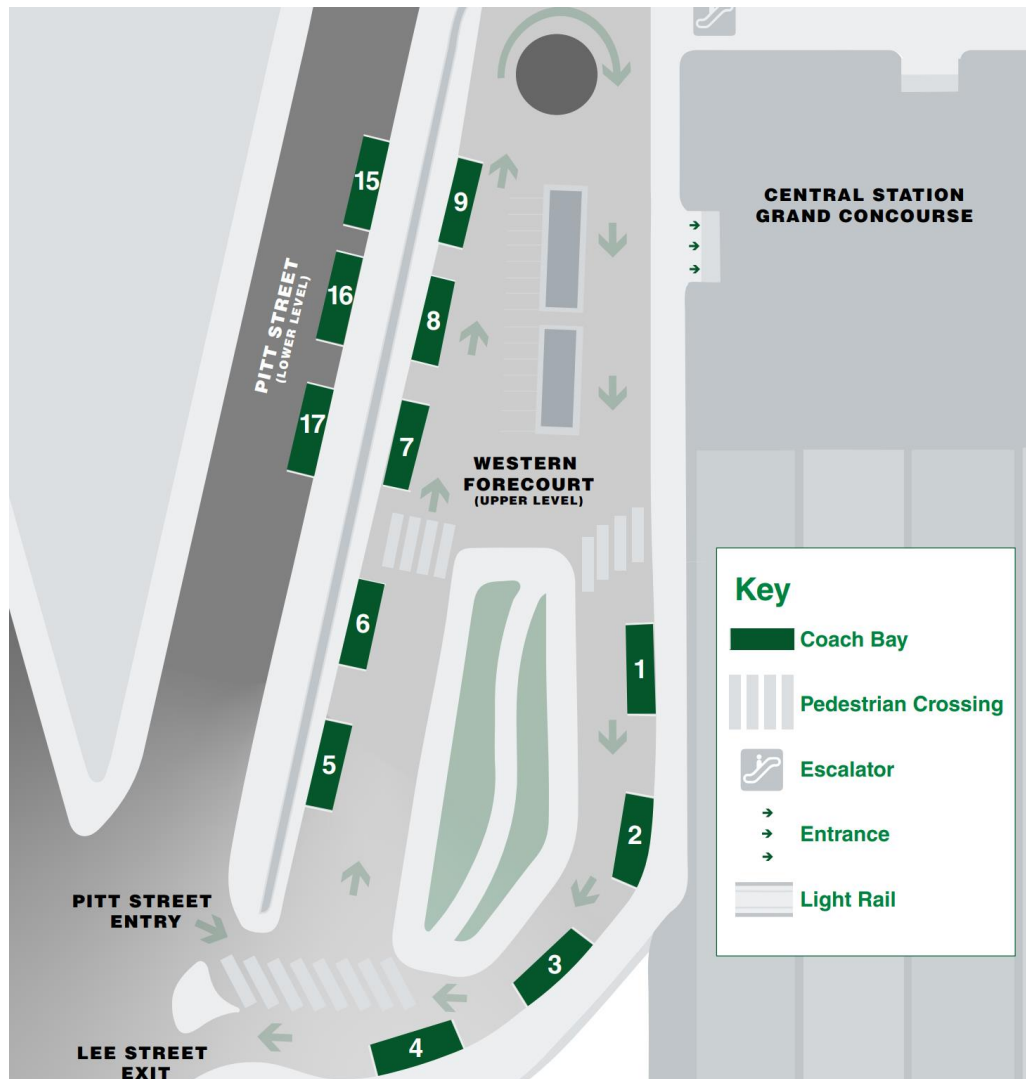
DCP 2012 also requires a set-down/ pick-up facility for use by the hotel, with capacity for at least two cars and a bus/ coach. There are various existing and future constraints that limit flexibility in the immediate vicinity noting that the site is afforded an approximate 35 metre frontage on Lee Street north of the existing pedestrian signals, with this space able to accommodate six cars or a bus/ coach and two cars at any one time.

Lee Street could potentially be pedestrianised in the future however with hotels tending to rely a 'front door' address and hotel patrons often needing use of valet services and porte cochere on arrival and departure, there is a real opportunity to make equitable use of the available space along Lee Street in the future (as discussed in Section 4.1.3). As discussed, the three set-down spaces on Lee Street adjacent to the site were included as part of the approved Atlassian development. These spaces form part of the ongoing Adina Hotel coach and set down strategy and envisaged to at least be partially retained for future pick-up/ set-down arrangements. Such arrangements could be investigated to create a shared space along the site frontage without materially affecting Lee Street pedestrians. Notwithstanding, there is also potential to make use of the existing 12 coach bays in close proximity to the site (nine within the Central Station Western Forecourt area and three on Pitt Street fronting Central Station) to create a new



integrated drop-off zone that would directly cater for expected hotel activity together with some commercial drop-off and pick-up activity. The surrounding coach facilities are shown in Figure 28.

**Figure 28: Surrounding coach bays**



Source: Murrays Coaches

Future coach and set down arrangements could be investigated further as part of a Coach Set Down Management Plan.

## 4.7 Emergency Vehicle Access

Emergency vehicle access to the site (and precinct generally) will be via the access arrangements as defined by both the interim and end state scenarios. Emergency vehicles could also park on Lee Street along the site frontage (or the public domain area if required). Qualified on-site employees would direct emergency workers to the relevant building location as required.



## 4.8 Transport Assessment

### 4.8.1 Trip Generation

To better understand the trip generation of the proposal, it is important to understand the population of the development. The following assumptions have been adopted to determine a theoretical population:

- Commercial – one person per 10 square metres GFA, equating to 2,923 people.
- Retail – one person per 25 square metres GFA, equating to 180 people.
- Hotel – 40 staff and 1.5 visitors per key, equating to 346 people.

As such, the proposal is anticipated to have a theoretical peak population of approximately 3,449 people across the day.

Based on this, the following assumptions have been adopted to understand the potential weekday peak hour trips generated by the development:

- 35 per cent of staff working in the commercial building would travel in the peak hour based on similar sites<sup>3</sup> surveyed for the updated office rates in the TfNSW Guide to Traffic Generating Developments (TDT 2013/04a).
- 25 per cent of retail and hotel staff, and hotel visitors would travel in the peak hour accounting for greater 'peak spreading' typical for such land uses.

On the basis of the above, the anticipated weekday peak hour trips by the theoretical peak population has been estimated adopting the target travel mode share for the area (discussed in Section 4.2), as shown in Table 12. The retail space is considered very much ancillary to all other uses in the precinct and not considered to generate its own trips during peak periods.

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<sup>3</sup> North Sydney, Parramatta, Sydney Olympic Park and Chatswood sites.



**Table 12: Weekday peak hour trip generation by mode**

| Mode                   | Person trips per hour |
|------------------------|-----------------------|
| Train                  | 686                   |
| Bus                    | 237                   |
| Ferry                  | 23                    |
| Light Rail             | 29                    |
| Vehicle (as driver)    | 43                    |
| Vehicle (as passenger) | 30                    |
| Bicycle                | 35                    |
| Walking                | 95                    |
| Other                  | 6                     |
| <b>Total</b>           | <b>1,184</b>          |

Table 12 indicates that the proposal has the potential to generate approximately 1,184 person trips in any weekday peak hour. This includes:

- 975 trips by public transport
- 130 trips by active travel (bicycle or walking) means
- 43 trips by vehicle (as driver)
- 30 trips as a vehicle passenger (private, taxi, rideshare).

Based on similar sites<sup>4</sup> surveyed as part of the TfNSW Technical Direction, a traffic generation rate of 0.4 vehicle movements per space has been conservatively adopted for any weekday peak hour. With a maximum 106 on-site parking spaces, it is anticipated that about 32 of the 43 estimated drivers (75 per cent) would park in the basement car park. Other drivers would use on-street set-down/ pick-up facilities or surrounding public car parks.

There are several publicly accessible car parks within a short walk of the precinct. These include the Wilson Parking operated sites on Quay Street and Thomas Street and in Market City, all to the north-west and within a 300 to 450 metre walk. Notwithstanding, due to the site's proximity to Central Station and changes in travel behaviour generally, private car usage is also likely to reduce even further in future years.

## 4.8.2 Cumulative Assessment

As the site forms part of the future Central Precinct Western Gateway sub-precinct, consideration has also been given to the likely traffic generating characteristics of the future redevelopment of CPS to the south (Block B) and Atlassian YHA site to the east (Block A) to understand the cumulative traffic generation.

<sup>4</sup> North Sydney and Parramatta sites office premises.



Reference has been made to the transport assessments prepared for the CPS site<sup>5</sup> and Atlassian YHA site<sup>6</sup>, with the combined traffic generation of all three sites summarised in Table 13.

**Table 13: Cumulative Traffic Generation**

| Site          | Land uses (area)  | Parking provision   | Peak hour traffic generation   |
|---------------|---|---|--|
| Adina         | Office (29,228m <sup>2</sup> )<br>Hotel (204 keys)<br>Retail (4,511m <sup>2</sup> ) | 106 car spaces  | 73 trips including:<br>- <b>33 to basement</b><br>- 40 set-down/ pick-up or parking off-site                                     |
| CPS           | Office (150,000m <sup>2</sup> )<br>Retail (5,000m <sup>2</sup> )                    | 121 car spaces<br>48 service vehicle bays (centralised distribution centre) | 248 trips including:<br>- <b>40 to basement car park</b><br>- <b>58 to the DC</b><br>- 150 set-down/ pick-up or parking off-site |
| Atlassian YHA | Office (58,000m <sup>2</sup> )<br>YHA (250 beds)<br>Retail (3,000m <sup>2</sup> )   | Approximately 10 loading spaces and nominal car parking                     | 80 trips mostly set-down/ pick-up or parking off-site<br>- <b>four use on-site parking</b>                                       |
| <b>Total</b>  |   |   | <b>400 trips (incl. 135 to basement)</b>   |

Table 13 suggests that the combined precinct could generate about 400 vehicle trips during any weekday peak hour. This includes about 135 vehicles that actually enter or exit the end state combined site basements and about 270 trips being set-down or picked-up, or parking off-site. These will also not all constitute new trips given the precinct has traditionally generated some level of traffic activity to accommodate the existing retail, accommodation and commercial uses that presently operate on the three sites. Toga Central is estimated to account for about 20 per cent of total future precinct generated traffic, with most trips associated with the CPS site.

### 4.8.3 Transport Impacts

The transport assessment for the CPS site included post development SIDRA Intersection modelling for the Lee Street/ Regent Street intersection and found that it would continue to operate well (at a Level of Service B) and with appropriate capacity to accommodate traffic associated with development of the whole precinct. Only minor impacts are realised with respect to queuing and degree of saturation. The existing and post ultimate development SIDRA results are reproduced in Table 14.

<sup>5</sup> Arup, Western Gateway Sub-Precinct Proposal: Block B 14-30 Lee Street, Haymarket NSW 2000 – Planning Statement – Transport, Traffic, Pedestrian and Parking Report dated 9 October 2019

<sup>6</sup> JMT Consulting, Atlassian Central Station – Transport Assessment dated 9 October 2019.



**Table 14: SIDRA Modelling Results – 2029 with development**

| Scenario                        | Peak | LOS | DOS  | 95 <sup>th</sup> Percentile queue length |
|---------------------------------|------|-----|------|--|
| Existing                        | AM   | B   | 0.71 | 87                                       |
|                                 | PM   | B   | 0.83 | 97                                       |
| Existing + Ultimate Development | AM   | B   | 0.76 | 93                                       |
|                                 | PM   | B   | 0.86 | 110                                      |

Source: Western Gateway Sub-Precinct Proposal: Block B, 14-30 Lee Street, Haymarket, NSW, 200

Overall, the modest increase in vehicle trips associated with all three sites (and other trips associated with the consolidated distribution centre) is not expected to present a significant impact to traffic in the local area nor the operation of the key surrounding intersections. Between two and three vehicle trips per minute does not represent a significant traffic related impact, especially with key intersections generally operating well. It is also noted that with some 4,000 to 5,000 vehicles currently travelling through the George Street/ Pitt Street intersection, the precinct development traffic would account for less than one per cent of total traffic through this intersection, which is negligible.

Based on the above, the anticipated traffic generated by the proposal and the broader precinct is not expected to materially affect the function or safety of the surrounding road network. This is applicable to a range of scenarios, with and without an ultimate consolidated precinct basement with a single access location.

The key transport impacts will be felt across the public transport network. With significant expansion of rail services associated with Sydney Metro Stage 2 and planned Sydney Metro West, plus the relief this will have on the existing heavy rail network, there will be an immense shift in train travel across Sydney. Overall, the anticipated use of train, light rail and bus services by the future building population is not expected to result in noticeable impacts to such a diverse public transport system, especially through the established and yet to be expanded Central Station.

The existing and planned direct pedestrian connections through Central Station, with a focus on the east-west movement of people to conveniently link Central Station with Railway Square will ensure a high level of pedestrian amenity in an essential public domain in the southern part of Sydney CBD. The proposal is anticipated to add approximately 15 pedestrians every minute, or 85 movements every five minutes along the key desire lines. Although the proposed development and the sub-precinct as a whole somewhat modifies the key pedestrian desire lines, the resultant additional pedestrian movements are not anticipated to significantly affect pedestrian amenity or capacity. Arup is completing detailed pedestrian modelling of the area to appropriately assess the pedestrian impacts of the development.

The public domain improvements proposed in the immediate vicinity, coupled with those intended to be delivered as part of a consolidated masterplan precinct and 'Western Walk' tunnel along Ambulance Avenue will further improve accessibility between the key generators and attractors.

#### **4.8.4 Queuing Assessment**

A queuing analysis based on the Guide to Traffic Management Part 2: Traffic Theory (Austroads, 2008) was completed to understand the potential queuing impacts to Lee Street. Based on a combined total of 137 vehicles accessing the basement car park during the peak hour (as summarised in Table 13) and



**2 and 8a Lee Street, Haymarket**  
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assuming an inbound percentage of 80 per cent during the AM peak hour, the 95<sup>th</sup> percentile queue for vehicles entering the site in the AM peak hour is expected to be between one and two vehicles. Site access at Lee Street/ Little Regent Street will be managed via boom gates which are well set back within the property boundary with internal storage capacity understood to be about 30 metres (or four vehicles). This would adequately serve any potential future demand and ensure little risk of any such queuing onto Lee Street.

Under the interim arrangements, the Atlassian and Adina sites are estimated to generate up to a combined 40 vehicles during peak hours.



## 5 Preliminary Construction Traffic Management Plan

### 5.1 Overview

This section seeks to provide an overview of the Construction Traffic Management Plan (CTMP) initiatives to be implemented as part of the construction works associated with the proposed development.

Specifically, this overview CTMP considers the following:

- construction site access arrangements
- anticipated truck volumes during construction stages
- truck routes to/ from the site
- requirements for works zones
- pedestrian and cyclist access
- site personnel parking
- traffic control measures
- overview of CTMP requirements.

A detailed CTMP would be prepared as part of future design stages and would analyse the cumulative effects of construction works within the Western Gateway Sub-precinct should works occur concurrently with the Atlassian YHA and the CPS sites.

### 5.2 Principles of Traffic Management

The general principles of traffic management during construction activities are as follows:

- minimise the impact on pedestrian and cyclist movements
- maintain appropriate public transport access
- minimise the loss of on-street parking
- minimise the impact on adjacent and surrounding buildings
- maintain access to/ from adjacent buildings
- restrict construction vehicle movements to designated routes to/ from the site
- manage and control construction vehicle activity near the site
- carry out construction activity in accordance with approved hours of works.

### 5.3 Work Hours

General demolition and construction works will be undertaken only within hours permitted under the development approval.

In some cases, after-hours permits will be sought from the relevant authorities where special requirements exist. Such works may include delivery of cranes, large plant or equipment required on the site that require oversize vehicle access. Workers would be advised of the approved work hours during induction.





## 5.4 Staging

The works are proposed to be completed according to the following two stages, with more detailed programme summarised in Table 15.

- Stage 1:
  - demolition
  - excavation
  - structure
  - façade
  - fit out and building services.
- Stage 2:
  - public domain and handover.

**Table 15: Construction staging**

| Activity   | Forecasted programme |
|--|----------------------|
| Site establishment/ fPPb strip out and PP demolition                     | Month 1-7            |
| fPPb demolition/ pedestrian access to HDP/ northern core area excavation | Month 4-10           |
| HDP piling/ excavation and super columns                                 | Month 4-12           |
| North core super structure start date                                    | Month 10/11          |
| fPPb slab infills and leisure deck structure                             | Month 15-20          |
| Tower super structure Lv7 to roof  | Month 22-38          |
| Tower façade and fitout  | Month 28-42          |
| Hoist removals and façade closure  | Month 37-39 & 40-41  |
| T&C hotel  | Month 36-38          |
| T&C all works  | Month 42-44          |
| External works and landscaping   | Month 40-44          |
| Weather & construction contingency                                       | 6 months             |
| <b>Overall project duration</b>  | <b>50 months</b>     |

## 5.5 Site Access and Loading

Construction vehicle access will be provided via Lee Street. Loading/ unloading will occur on Lee Street given site constraints. A works zone application will be made to the relevant authorities prior to commencement of works.

As part of the detailed CTMP, a traffic guidance scheme (TGS) will be prepared in accordance with the principles of the Traffic Control at Work Sites manual (TfNSW, 2022). The TGSs primarily show where construction signs will be located at specific locations (such as uncontrolled intersections) along the approved truck routes to warn other road users of the increase in construction vehicle movements.

Access to the neighbouring sites by emergency vehicles would not be affected by the works as the road and footpath frontages would be unaffected. Emergency protocols on the site would include a



requirement for site personnel to assist with emergency access from the street. All truck movements to the site and/or incident point would be suspended and cleared.

## **5.6 Construction Staff Parking**

It is anticipated that there could be up to 600 workers on-site during peak main structure activities.

No construction worker parking will be provided. Given the site's proximity to a range of high frequency public transport services, workers will be encouraged to use public transport to access the site. During site induction, workers will be informed of the existing bus network servicing the site. Appropriate arrangements will be made for any equipment/ tool storage and drop-off requirements.

## **5.7 Heavy Vehicle Traffic Generation**

Construction vehicles generated by the site would generally include vehicles up to 12.5 metre heavy rigid vehicles, with permits required for one-off deliveries using 19 metre articulated vehicles. There is expected to be up to a maximum of 60 vehicles per day during main structure works. At other phase this is likely to be less at approximately 30 to 40 vehicles per day.

Any future detailed CTMP will document and consider the cumulative impact of all other nearby construction sites that are occurring concurrently.

## **5.8 Heavy Vehicle Access Routes**

Heavy vehicle movements would be restricted to designated routes and confined to the arterial road network wherever feasible. Truck routes to/ from the site have been identified with the aim of providing the most direct routes to/ from the site as well as minimising the impact of heavy vehicles on local roads.

Figure 29 and Figure 30 provide a summary of the anticipated construction vehicle routes to/ from the site. Truck drivers will be advised of the designated truck routes to/ from the site.

### **5.8.1.1 APPROACH ROUTES**

- North: Western Distributor, Harris Street, Regent Street, Lee Street.
- South: Lee Street, Regent Street, Gibbons Street.
- East: Anzac Parade, Fitzroy Street, Foveaux Street, Elizabeth Street, Eddy Avenue, Pitt Street, Lee Street.
- West: Victoria Road, Western Distributor, Allen Street, Harris Street, Regent Street, Lee Street.

### **5.8.1.2 DEPARTURE ROUTES**

- North: Lee Street, Quay Street, Ultimo Road, Darling Drive, Pier Street, Harbour Street, Western Distributor.
- South: Lee Street, Regent Street, Botany Road.
- East: Lee Street, Regent Street, Cleveland Street, Anzac Parade.
- West: Lee Street, Regent Street, Cleveland Street, Anzac Parade.



2 and 8a Lee Street, Haymarket  
5 Preliminary Construction Traffic Management Plan

Figure 29: Construction vehicle approach routes

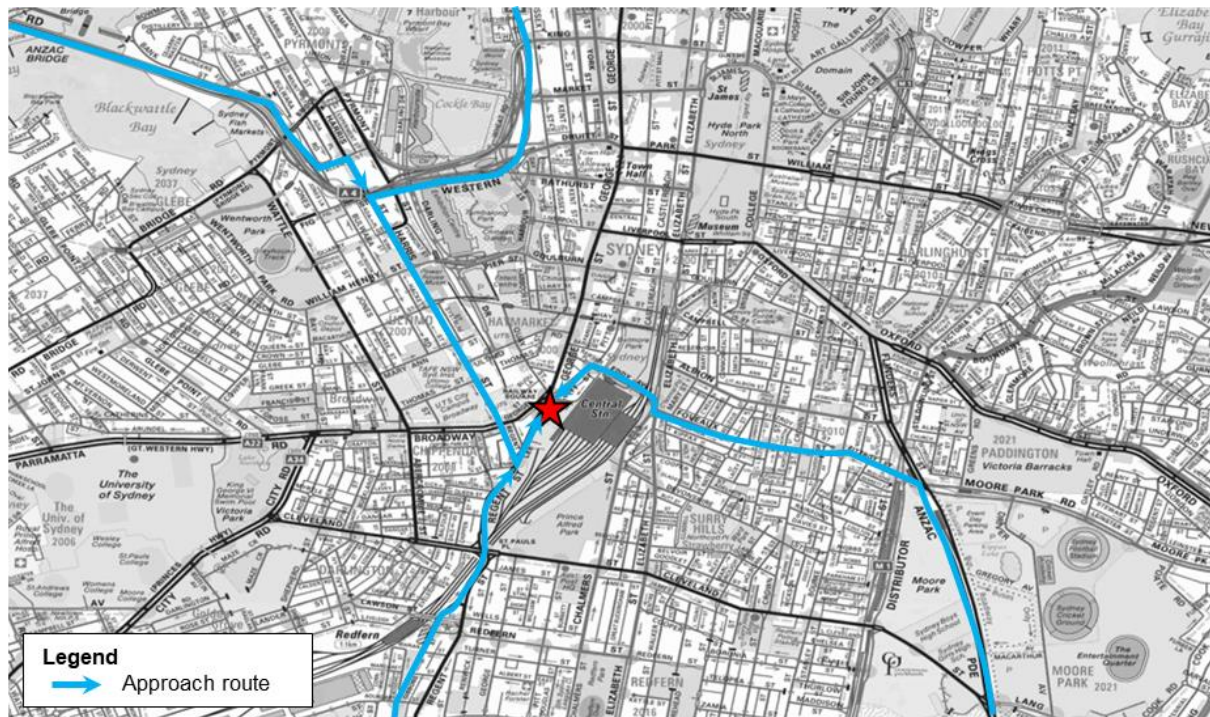
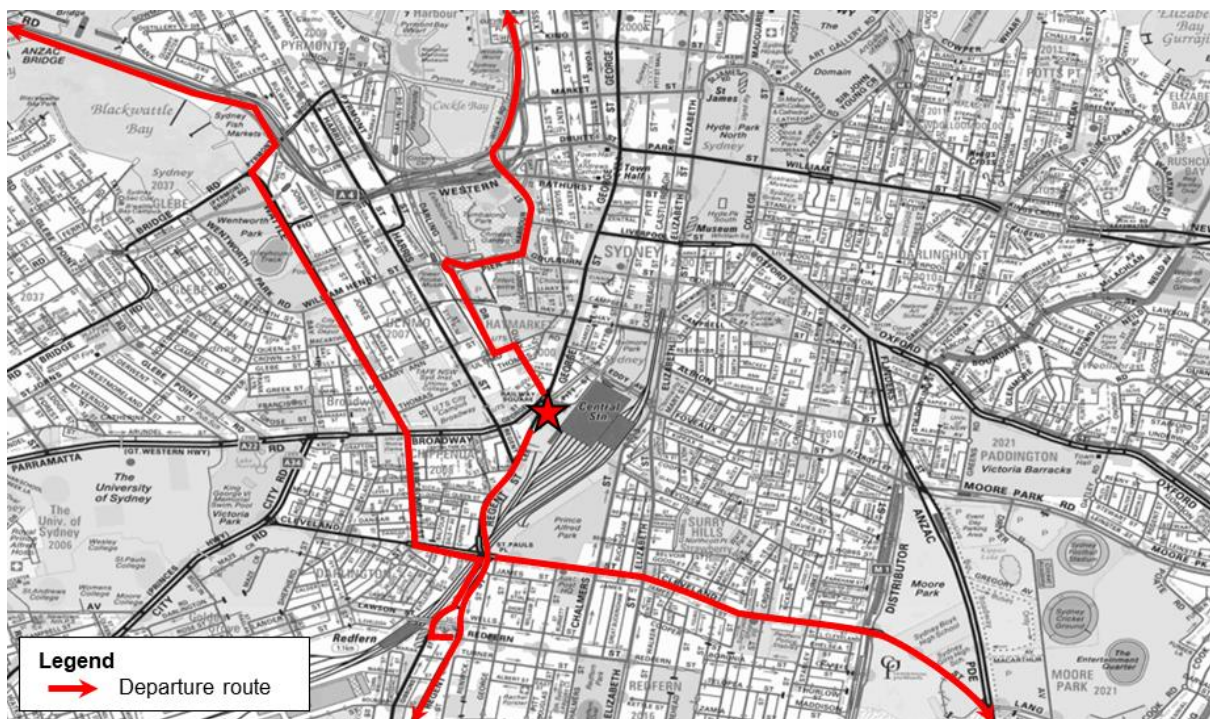


Figure 30: Construction vehicle departure routes



Base image source: Sydway





## 5.9 Pedestrian and Cyclist Access

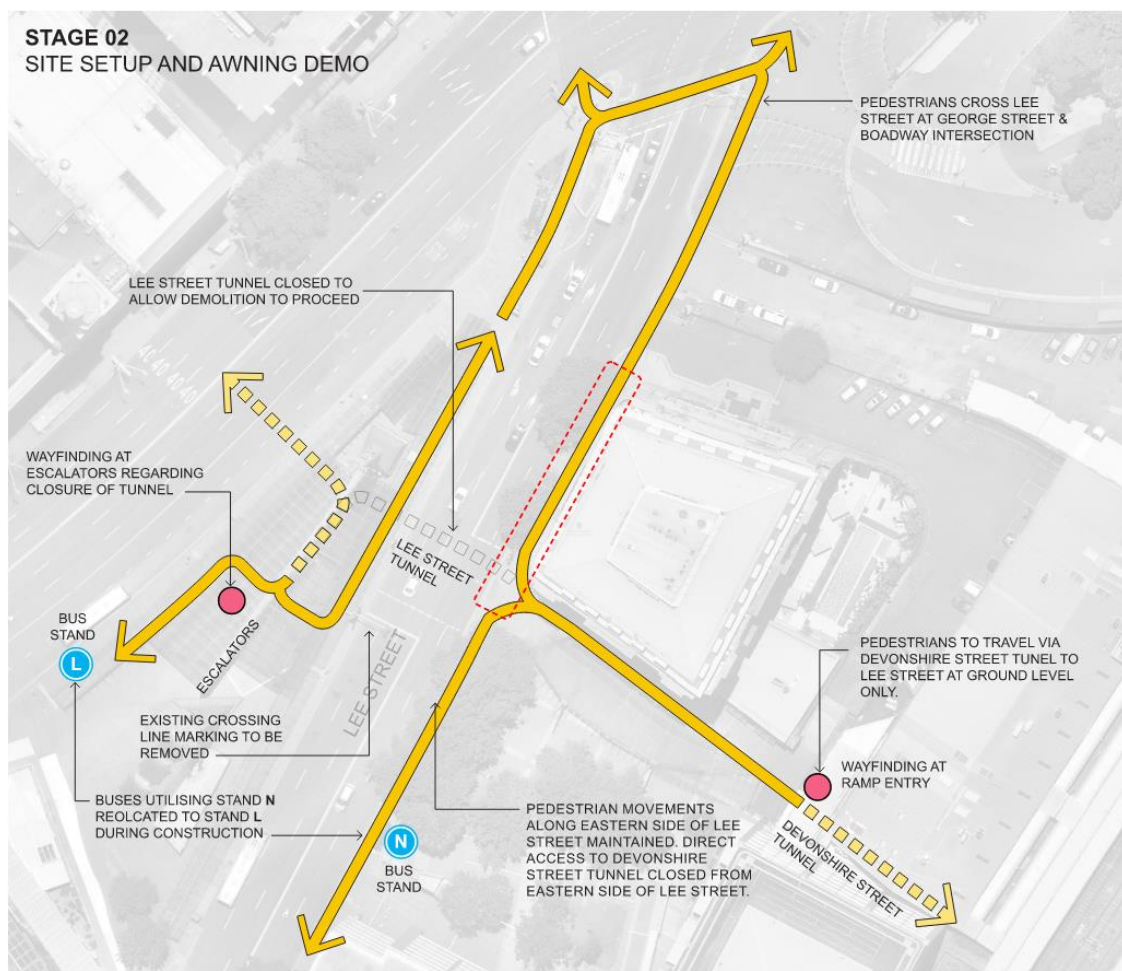
During the construction work various pedestrian access diversions will be required to ensure safe pedestrian movement surrounding the site. A coordinated plan will be developed in consultation with Atlassian and CPS to manage multiple construction works within the sub-precinct.

The exact pedestrian access strategy will vary depending on construction staging. Where required, B-Class hoardings will be installed along the perimeter of the site where overhead works are occurring to maintain and ensure safe pedestrian and cyclist passage adjacent to the site.

Where B-Class hoarding is not required, A-Class hoarding will be provided. The corresponding traffic management plans will assist in minimising the impacts to pedestrian and cyclist movements from construction related traffic. Wayfinding signage will be erected at key locations to inform pedestrians of any changes to access.

The proposed pedestrian access arrangements are detailed in the Preliminary Construction Management Plan with the indicative pedestrian access during site establishment/ awning demolition and construction shown in Figure 31 and Figure 32 respectively.

**Figure 31: Pedestrian management during site establishment**



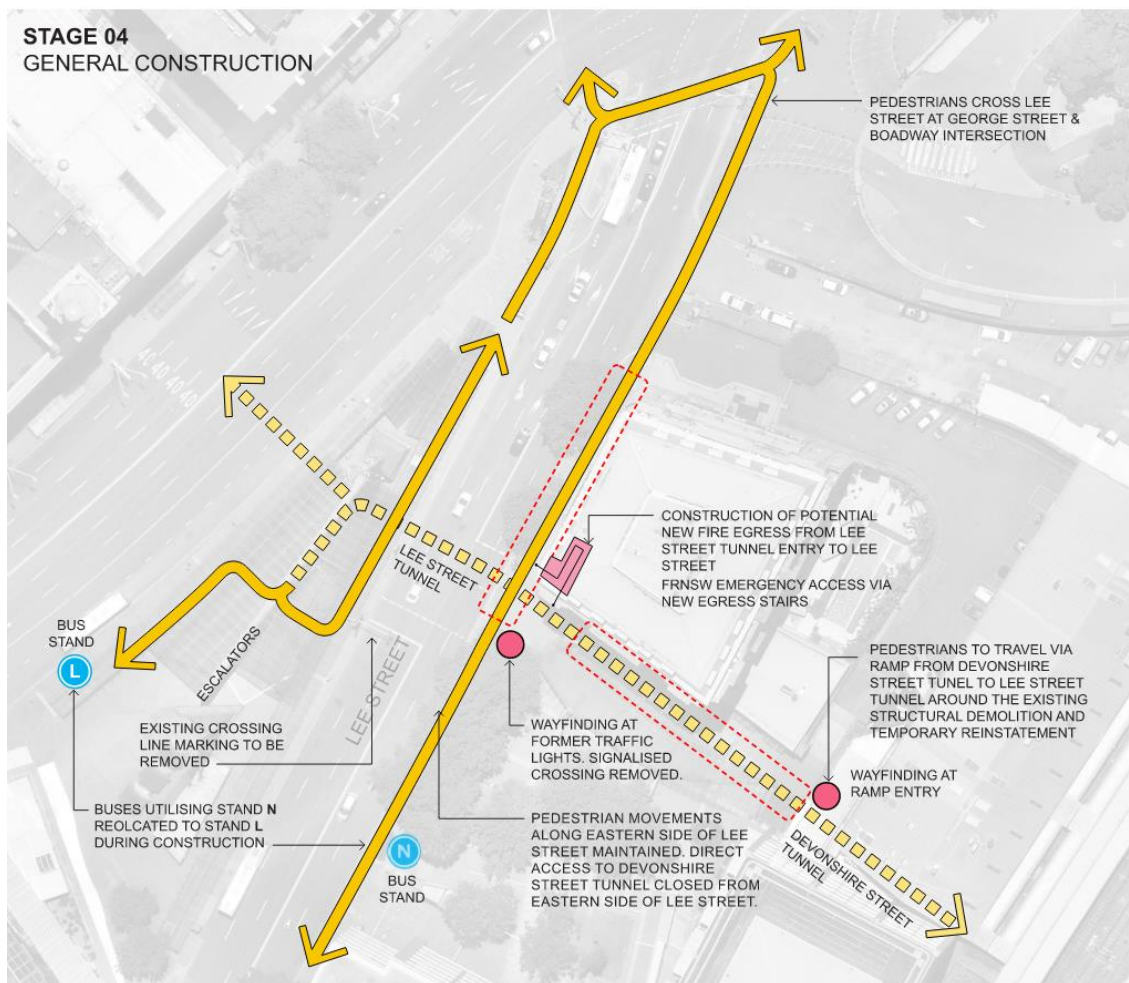
Source: TOGA Project Services Pty Ltd



## 2 and 8a Lee Street, Haymarket

### 5 Preliminary Construction Traffic Management Plan

Figure 32: Pedestrian management during construction



Source: TOGA Project Services Pty Ltd

## 5.10 Overview of CTMP Requirements

This letter provides an overview of the CTMP initiatives that would be implemented for the demolition and construction works associated with the project. A detailed CTMP would cover the following additional information:

- Description of construction activities and duration.
- Construction work hours.
- Detailed assessment of construction traffic impacts including any cumulative impacts.
- Details regarding any one-off activities for installation of cranes and other equipment.
- Swept path analysis of heavy vehicle access to the site and Works Zone.
- Detailed assessment of on-street parking impacts.
- Emergency vehicle access.
- Impacts to public transport services.
- Traffic Guidance Scheme(s).
- Contact details of key project personnel.





## 6 Overview Loading Dock Management Plan

### 6.1 Loading Details

#### 6.1.1 Available Loading Facilities

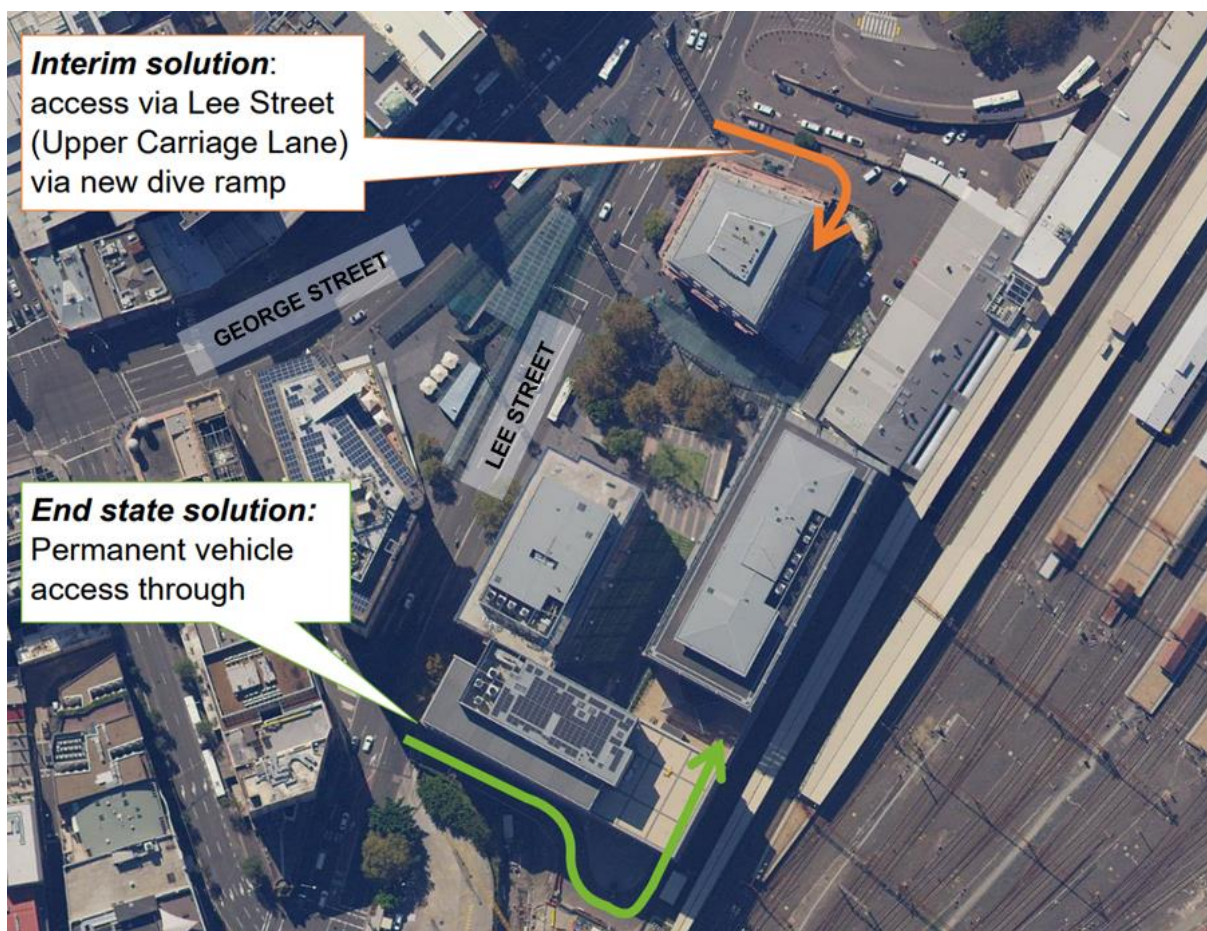
The loading dock on Basement 3 has ultimately been designed to accommodate future access via CPS within the precincts integrated basement (end state design). Access to the overall precinct would be via the accessway adjacent to the Lee Street/ Little Regent Street intersection south of the Central Station precinct site. It is envisaged that under this scenario Ambulance Avenue would be pedestrianised.

As an interim arrangement, in the event that construction of the CPS site is not complete the loading facilities would be accessed from Upper Carriage Lane via a new dive ramp which forms part of the Atlassian development.

Necessary height clearances are provided in Basement 3 for vehicles accessing the loading facilities.

The proposed external interim and end state loading dock access arrangements are shown in Figure 33 and Basement 3 layout under both arrangements shown in Figure 34 and Figure 35.

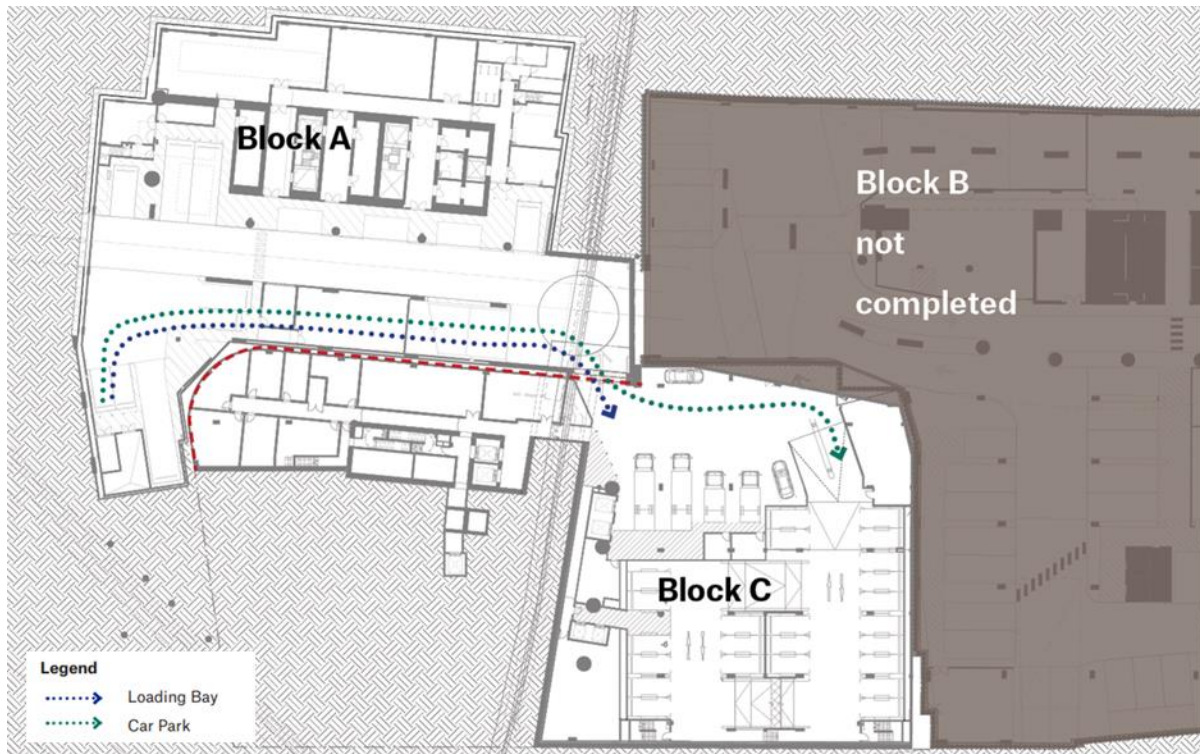
**Figure 33: Proposed interim and end state loading dock access arrangements**



Source: Atlassian Central Station Draft Loading Dock Management Plan, JMT Consulting (23 November 2020)

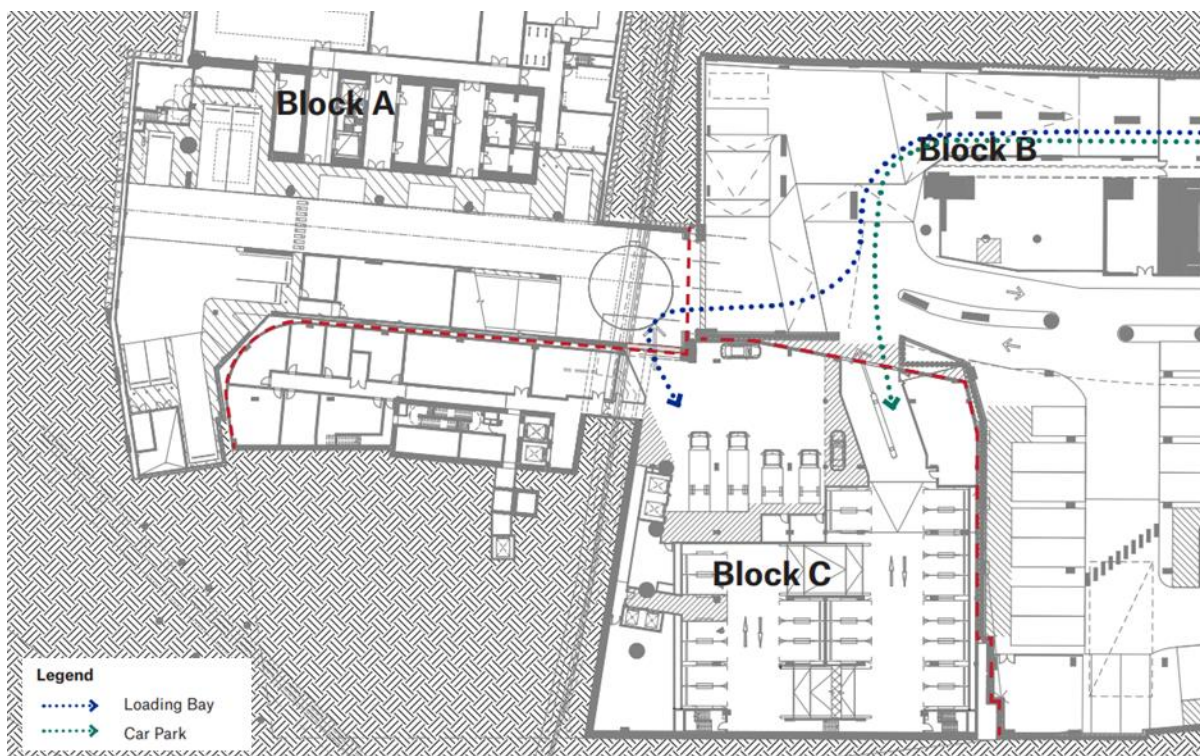


Figure 34: Basement 3 loading facilities – interim access arrangements



Source: Bates Smart, TOGA Central – response to submission, 25 November 2022

Figure 35: Basement 3 loading facilities – end state access arrangements



Source: Bates Smart, TOGA Central – response to submission, 25 November 2022

Detailed swept paths have been completed of the proposed basement layout with all vehicles to enter and exit the loading dock in a forward direction and via the adjacent site basements and precinct access arrangements, and is attached in Appendix A. Access under both interim and end state arrangements are appropriate and would operate satisfactorily indicating that the site can accommodate all vehicles up to 8.8m long MRVs without the use of the Atlassian turntable (under both interim and end-state arrangements). This arrangement will ensure practical forward entry and exit movements by all service vehicles is achieved. Some minor manoeuvring internal to the dock itself for MRV's will be required noting that this is both common and acceptable in constrained basements in inner city locations where space is at a premium.

The layout of the basement loading dock is appropriate having regard to the size and type of service vehicles, time of day demand and associated swept paths. All loading bays can be accessed independently in accordance with Australian Standards. The basement design and loading dock layout has been thoroughly investigated, including the most appropriate configuration and to ensure maximum efficiency while maintaining a safe user interface.

### **6.1.2 Hours of Operation**

The available loading dock access hours for service vehicles are anticipated to be as follows:

- Weekdays: 6:00am to 9:00pm
- Weekends and public holidays: 8:00am to 6:00pm.

### **6.1.3 Demand**

As discussed in Section 4.5, loading requirements have been determined with reference to the DCP and TfNSW requirements as well as Stantec's own database and experience on other previous projects with similar land uses. It was determined that the site would require the use of five on-site loading bays.

The typical available operating hours of a loading dock are 12 to 15 hours per day resulting in opportunity to spread deliveries across the day and to manage via a booking system.

Both the interim and end state loading arrangements would facilitate up to six service vehicles including two MRVs, two SRVs and two vans. Based on an average stay of 20 to 30 minutes, the site could accommodate about 15 service vehicles in any peak hour, which exceeds the anticipated loading demand.

## **6.2 Loading Management**

### **6.2.1 Demand Management**

Loading dock users will be required to book a timeslot prior to arrival. This would be done through an online booking system such as <https://www.buildingmanager.com>, <https://bestrane.com.au> or similar. Access to the dock would be granted only to those who have booked via the selected booking system with limited bookings available per time slot based on the capacity at the time. Unauthorised vehicles would be instructed to leave the site immediately and signage would be in place to inform all delivery couriers of this requirement. All booking requests generally need to be logged in advance though provision for short-term requirements can also be factored.



Bookings through the online system will collect the following details:

- delivery type/ reason
- day/ date, timeslot (one timeslot or more)
- carrier/ vehicle type/ size
- vehicle number plate
- company (name, ABN, address, phone/ mobile, email, etc.)
- receiver (tenant/ owner)
- loading space reference number
- additional comments.

The booking system will allow one of loading bays to be booked and will clearly outline the maximum vehicle size able to be accommodated by the specific bay. It is the responsibility of the dock manager and retail tenants/ owners to ensure that all vehicles permitted access to the site through the online booking system remain strictly within the allowable dimensions (length, height etc.).

Where practical, the building manager should minimise loading activity during the road network peak periods for the site and road network, typically the weekday morning and afternoon peaks.

It will be the responsibility of the building manager to advise approaching loading dock users of any delays or extended loading/ unloading activities as early as practical to avoid inconvenience to the approaching driver. Bookings would be limited to 20-to-30-minute periods. The building manager must contact the relevant receiver should a loading vehicle exceed their booking timeslot by more than five or 10 minutes. Vehicles would be permitted to enter the loading dock once the booked loading bay has been vacated, or other bay able to be used.

The building manager and/ or retail tenancy personnel will also monitor use of the loading dock to ensure the loading spaces are used for site deliveries and waste collection only, and trade vehicles as required, with no other unauthorised use permitted. They will also be responsible for ensuring materials are not stored in the loading bays or associated loading/ unloading areas at any time.

Queuing would be nominal given loading dock management protocols are designed to ensure that vehicles arrive according to the pre-defined schedule. Vehicles arriving outside their allocated booking time are commonly denied access, with protocols and design to allow them to turnaround on-site and exit in a forward direction. As noted, Toga has engaged extensively with CPS and Atlassian and discussed access opportunities for the end-state precinct. Traffic volumes, including service vehicles have been communicated with overall volumes not materially changing the function of the consolidated access driveway. The delivery demands of the Toga Central site will be low both in total volumes and when compared with those estimated as part of CPS.

Considering the above, it is expected that with the proposed booking system and demand management, the loading dock can operate as intended with minimal impact to site or road network traffic.

## **6.2.2 Traffic and Pedestrian Management**

All loading and unloading activities are to be always conducted within the site. The designated loading dock area is to remain available for always loading and unloading purposes. No storage of goods or parking is to be carried out in these areas.



Flashing warning lights at the loading dock access will also be provided to warn workers/ staff within the dock when service vehicles are using the turntable (in the interim state) and manoeuvring into the dock.

### **6.2.3 Operational Review**

This loading dock management plan should be reviewed regularly (at least once a year) to ensure that the details outlined remain relevant for site operations and activities which are required to occur through the dock.





## 7 Preliminary Green Travel Plan

### 7.1 Introduction

#### 7.1.1 Travel Plan Framework

Transport is a necessary part of life, but it has economic, public health and environmental consequences. The transport sector is one of the fastest growing emissions sectors in Australia, and therefore is one of the key opportunities for reducing greenhouse gases. As well as delivering better environmental outcomes, providing a range of travel choices with a focus on walking, cycling and public transport will have major public health benefits and will ensure a strong and prosperous community.

The physical infrastructure being provided as part of the development is only part of the solution. A green travel plan (GTP) will ensure that the transport infrastructure, services and policies both within and external to the site are tailored to the users and coordinated to achieve the most sustainable outcome possible.

#### 7.1.2 What is a Green Travel Plan?

A Green Travel Plan (GTP) is a package of measures aimed at promoting sustainable travel and reducing reliance on the private car. It is not designed to be 'anti-car' however it will encourage and support people's aspirations for carrying out their daily business in a more sustainable way. Travel plans can provide both:

- measures which restrict car use (disincentives or 'sticks')
- measures which encourage or support sustainable travel, reduce the need to travel or make travelling more efficient (incentives or 'carrots').

The travel plan would promote the use of transport, other than the private car, provide choice for staff to travel to and from the site, which is more sustainable and environmentally friendly.

Indeed, there are a range of "non-car" transport options that are available at the site which have been described in this report.

Given the developments aim to reduce private travel to the site, the implementation of a GTP would be beneficial.

### 7.2 Key Objectives

The aim of the GTP is to bring about better transport arrangements for living and working at the site. The key objectives of the Travel Plan are:

- To encourage walking.
- To encourage cycling.
- To encourage the use of public transport.
- To reduce the use of the car, in particular single car occupancy.
- Where it is necessary to use the car, encourage more efficient use.

It is the intention therefore that the travel plan will deliver the following benefits:



- Enable higher public and active travel mode share targets to be achieved.
- Contribute to greenhouse gas emission reductions and carbon footprint minimisation.
- Contribute to healthy living for all.
- Contribute to social equity and reduction in social exclusion.
- Improve knowledge and contribute to learning.

## **7.3 Site Specific Measures**

The location of the site, in terms of its proximity to a wide range of sustainable transport including bus, train, light rail and future metros services is a key consideration for development in the precinct. A GTP will put in place measures to raise awareness and further influence the travel patterns of people travelling to/ from the site with a view to encouraging modal shift away from cars.

The following potential measures and initiatives could be implemented to encourage more sustainable travel modes:

1. Limiting on-site parking provision.
2. Provide a Travel Access Guide (TAG) which would be provided to all staff, residents, guests and publicly available to all visitors. The document would be based on facilities available at the site and include detail on the surrounding public transport services and active transport initiatives. The TAG would be updated as the surrounding transport environment changes.
3. Providing public transport information boards/ apps to inform staff, residents, guests and visitors of alternative transport options (the format of such information boards would be based upon the TAG).
4. Providing a car sharing pod(s) on-site or nearby and promoting the availability of car sharing pods for trips that require the use of private vehicles.
5. Providing bicycle facilities including secure bicycle parking for staff and residents, bicycle racks/ rails for visitors and shower and change room facilities.
6. Encouraging staff that drive to work and park on surrounding roads to carpool through creation of a carpooling club or registry/ forum.
7. Regularly promoting ride/ walk to work days.
8. Providing a regular newsletter to all staff and residents bringing the latest news on sustainable travel initiatives in the area.

### **7.3.1 Travel Access Guide (TAG)**

A TAG provides information to staff and visitors on how to travel to the site using sustainable transport modes such as walking and public transport. The information is presented visually in the format of a map (or app) showing the site location and nearby transport modes highlighting available pedestrian and cycle routes. The information is usually presented as a brochure (or app) to be included in a welcome pack or on the back of company stationery and business cards.



### 7.3.2 Information and Communication

Several opportunities exist to provide staff, residents, guests and visitors with information about nearby transport options. Connecting them with information would help to facilitate journey planning and increase their awareness of convenient and inexpensive transport options which support change in travel behaviour. These include:

- Transport for NSW provides bus, train and ferry routes, timetables and journey planning through their Transport Info website: <http://www.transportnsw.info>.
- Council provides a number of services and a range of information and events to encourage people of all levels of experience to travel by bicycle:  
<https://www.cityofsydney.nsw.gov.au/lists-maps-inventories/sydney-cycling-map>

In addition, connecting residents, staff and visitors via social media may provide a platform to informally pilot new programs or create travel-buddy networks and communication.

### 7.3.3 Monitoring of the GTP

There is no standard methodology for monitoring the GTP, but it is suggested that it be monitored to ensure that it is achieving the desired benefits and modify it if required. It will not be possible at this stage to state what additional modifications might be made as this will be dependent upon the particular circumstances prevailing at that time.

The GTP should be monitored on a regular basis, e.g. yearly, by carrying out travel surveys. Travel surveys will allow the most effective initiatives of the GTP to be identified, and conversely less effective initiatives can be modified or replaced to ensure the best outcomes are achieved. It will clearly be important to understand people's reasons for travelling the way they do: - any barriers to changing their behaviour, and their propensity to change.

To ensure the successful implementation of the GTP, a Travel Plan Coordinator should be appointed to ensure the successful implementation of the GTP. This could be the building manager or a member of the body corporate.

## 7.4 Summary

The proposed development would be able to develop and utilise a travel plan to actively promote increased use of sustainable transport modes. Although it is difficult to predict what measures might be achievable, the above measures provide a framework for the site and implementation of a future travel plan.



## **8 Conclusion and Recommendations**

Based on the analysis and discussions presented within this report, the following conclusions are made:

1. 2 and 8a Lee Street, Haymarket is part of a future Central Precinct Western Gateway sub-precinct that is in a prime location providing staff and visitors doorstep access to a vast public transport network whether by bus, light rail or train (metro, suburban or interstate heavy rail). This establishes significant opportunities for development whilst keeping private vehicle trip reliance to a minimum.
2. The site is currently occupied by the 98-room Adina Apartment Hotel Sydney Central (Lot 30) and various specialty retail stores fronting Henry Deane Plaza (Lot 13) with the proposal facilitating a significantly expanded hotel comprising approximately 204 rooms, commercial office space covering 29,228 square metres gross floor area (GFA) and lower level retail space across 4,511 square metres GFA.
3. The proposal integrates with future pedestrian zones planned through the precinct including new over and under platform connections linking the station with Railway Square through the precinct; as well as two new grade separated connections between the Adina and Atlassian YHA sites. A future under platform connection to the north of the site ('Western Walk') is envisaged to transform Ambulance Avenue into a pedestrianised corridor.
4. This proposal is aligned with one of City of Sydney Council's key moves to provide employment growth in well located new tower clusters where taller building with higher floor space ratios are permitted for income-earning uses.
5. Given the sites' prime location to high frequency and capacity public transport services and the low parking provisions anticipated for the site (less than 110 spaces), mode share targets have been developed for travel behaviours for the future population of the site.
6. The targets include approximately 60 per cent of worker trips to the development to be by train and 20 per cent by bus, whilst trips by vehicle (as driver) are targeted to account for four per cent. These targets are generally consistent with the JTW data for the area, except for a targeted higher portion of train trips and lower vehicle trips.
7. The proposal generates a maximum City of Sydney LEP 2012 parking requirement of 106 parking spaces (including five accessible spaces), plus nine motorcycle spaces and four car share spaces. The proposal can achieve the maximum parking requirement across three new split basement levels south of the heritage hotel building, with other end of trip facilities equally important to catering for future demands, all within the maximum City of Sydney LEP 2012 requirements.
8. The proposed total provision of 295 bicycle spaces (223 staff and 72 visitor) is considered more than sufficient in meeting the expected demand given that it represents around a nine per cent travel mode share based on the projected building population, or a seven per cent increase on the existing mode share for the area.
9. The end state loading arrangements are expected to accommodate up to six service vehicles at any one time including two MRVs, two SRVs and two vans/ utes. This would accommodate about 15 deliveries per hour assuming a stay of 20 to 30 minutes and allowing for time between deliveries.
10. There are various existing and future constraints that limit the ability to provide basement car park access and/ or set-down/ pick-up facility however there is available space along Lee Street north of the pedestrian signals to provide for such facilities. Such a facility would meet the DCP 2012 requirement of a bus/ coach space plus space for two cars and aid efficient future set-down/ pick-up activity.



## 2 and 8a Lee Street, Haymarket

### 8 Conclusion and Recommendations

11. The proposal considers an interim basement car park access via the Atlassian drive ramp aligned with the existing Upper Carriage Lane that transitions up from Lee Street. Ultimately precinct access is anticipated via the adjacent CPS site with the consolidated access at the southern end of the precinct expected to be able to accommodate all traffic and loading demand.
12. Based on the anticipated population of the proposed development and the target mode share splits, the site is expected to generate 1,184 people trips in the weekday peak hours including 686 trips by train, 237 trips by bus, 130 trips by active means, 43 trips by car (as a driver) and 30 trips as a car passenger or using taxi/ rideshare services.
13. Of the 43 vehicle trips generated by people driving to/ from the site in the peak hours, about 32 trips would likely be associated with basement parking with the remainder using the on-site set-down/ pick-up area or people parking off-site.
14. The consolidated site assessment indicates that the precinct is likely to generate 400 vehicle trips during any weekday peak hour. Most of these (about 270 trips) would use the set-down/ pick-up facilities or park off-site. Only about 135 trips are estimated to actually enter or exit the combined site basements.
15. With the existing sites also generating existing traffic, the net change is expected to be moderate and amount to less than two or three vehicle trips per minute.
16. The traffic generated by the development in comparison to the existing traffic conditions is not expected to materially impact the function or safety of the road network. Furthermore, the anticipated public transport, cyclist and pedestrian trips are not expected to result in any adverse effects to the public and active network infrastructure when considering that staff residences are located across the Greater Sydney Metropolitan region, and therefore will disperse the trips across the broader network.



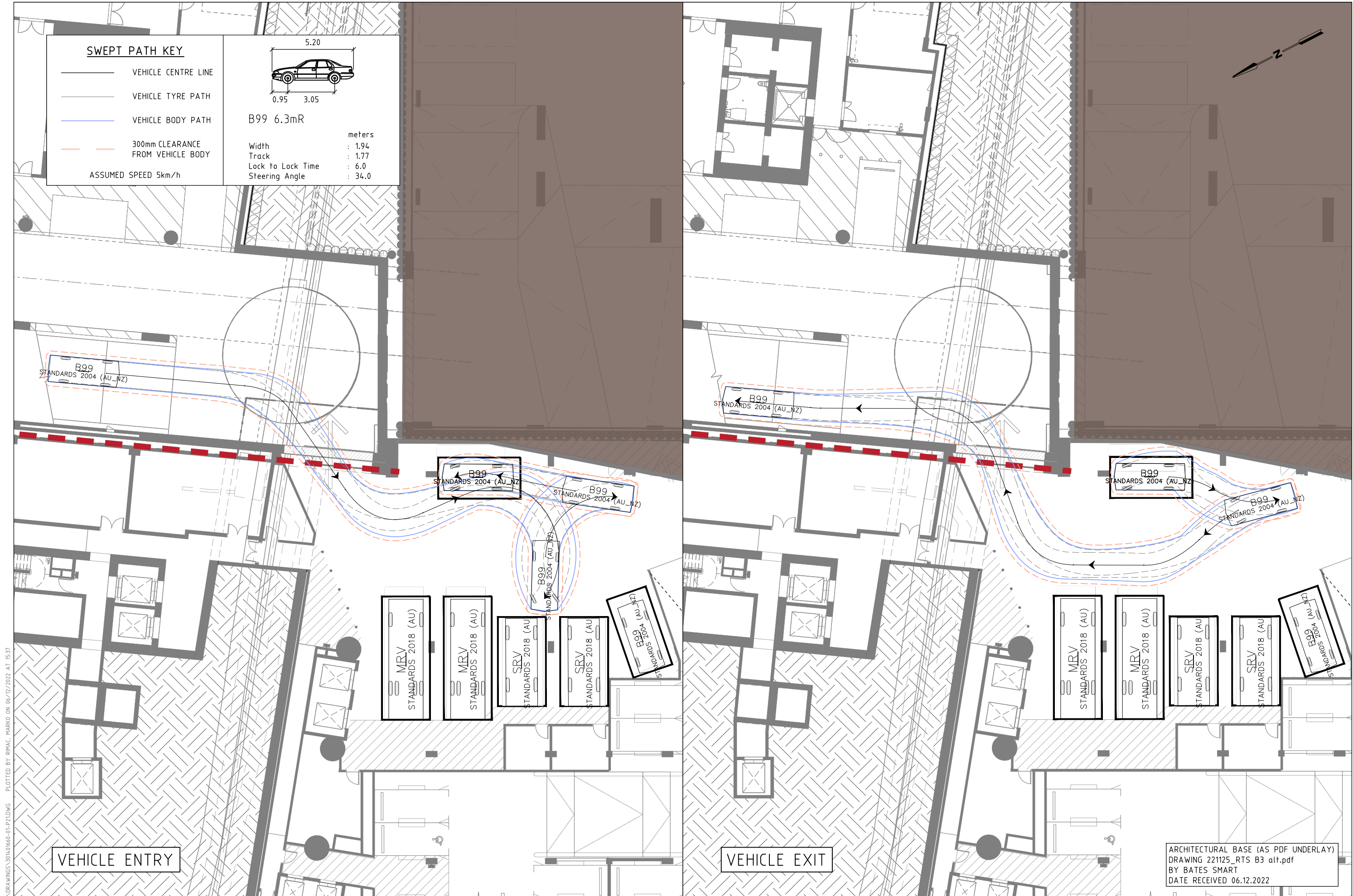


## Appendix A Swept Path Assessment



## **A.1 Interim Arrangement**





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**PRELIMINARY PLAN**  
FOR DISCUSSION PURPOSES ONLY  
SUBJECT TO CHANGE WITHOUT  
NOTIFICATION

**WARNING**  
BEWARE OF UNDERGROUND SERVICES  
THE LOCATIONS OF UNDERGROUND SERVICES ARE  
APPROXIMATE ONLY AND THEIR EXACT POSITION  
SHOULD BE PROVEN ON SITE. NO GUARANTEE IS  
GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

DESIGNED  
M.RIMAC  
  
APPROVED BY  
R.HAZELL

DESIGN CHECK  
R.HAZELL  
  
DATE ISSUED  
6 DECEMBER 2022

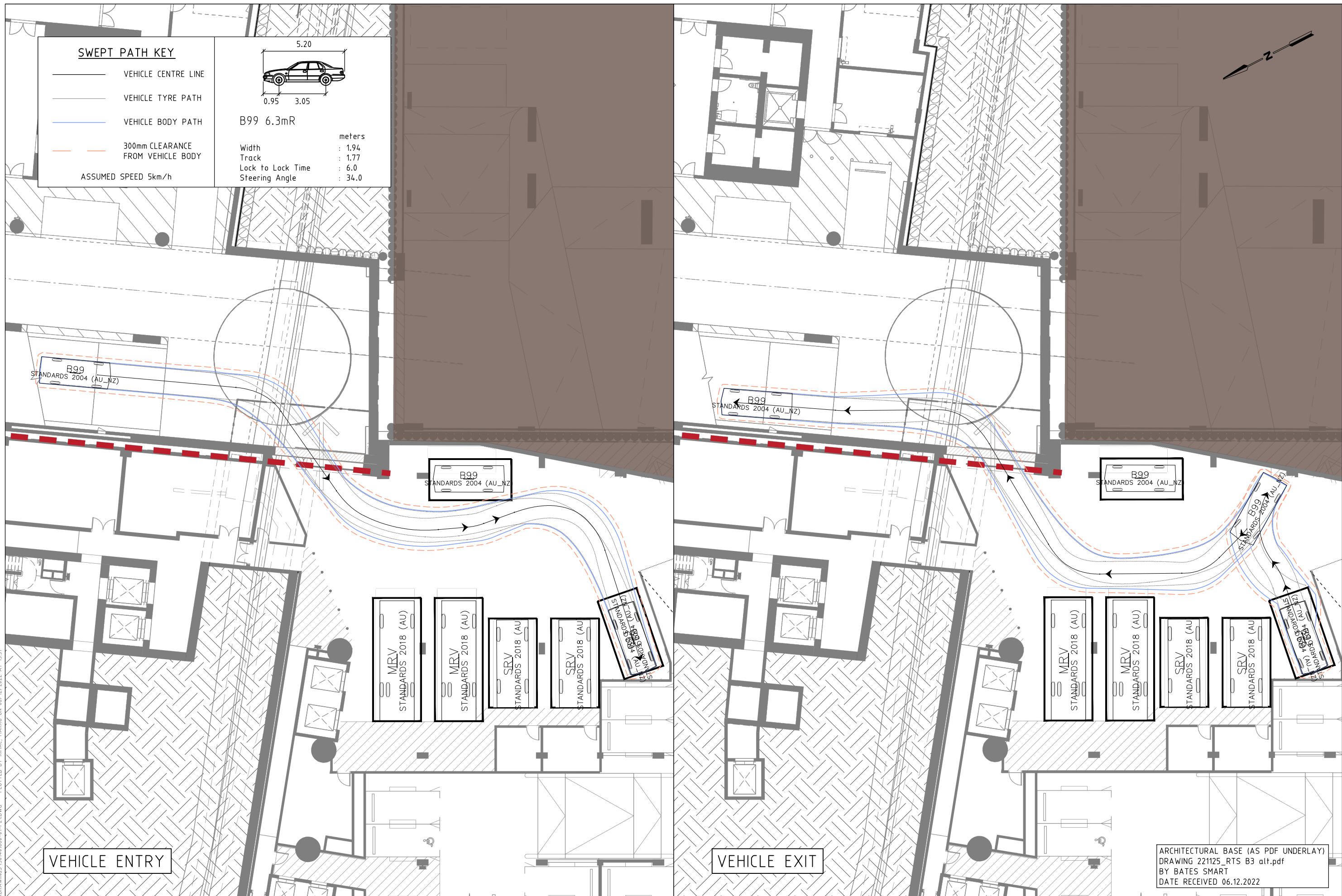
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**TOGA CENTRAL**  
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**LOADING DOCK - DAY 1 SCENARIO**  
**VEHICLE SWEEP PATH ASSESSMENT**  
DRAWING NO. 301401660-01-01 SHEET 01 OF 04 ISSUE P21

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DESIGNED  
M.RIMAC  
  
APPROVED BY  
R.HAZELL

DESIGN CHECK  
R.HAZELL  
  
DATE ISSUED  
6 DECEMBER 2022

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**TOGA CENTRAL**  
**2 LEE STREET, HAYMARKET**  
**LOADING DOCK - DAY 1 SCENARIO**  
**VEHICLE SWEEP PATH ASSESSMENT**  
DRAWING NO. 301401660-01-02 SHEET 02 OF 04 ISSUE P21

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SUBJECT TO CHANGE WITHOUT  
NOTIFICATION

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GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

DESIGNED  
M.RIMAC

APPROVED BY  
R.HAZELL

DESIGN CHECK  
R.HAZELL

DATE ISSUED  
6 DECEMBER 2022

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CAD FILE NO.  
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**TOGA CENTRAL**  
**2 LEE STREET, HAYMARKET**  
**LOADING DOCK - DAY 1 SCENARIO**  
**VEHICLE SWEEP PATH ASSESSMENT**

DRAWING NO. 301401660-01-03

SHEET 03 OF 04

ISSUE P21





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**PRELIMINARY PLAN**  
FOR DISCUSSION PURPOSES ONLY  
SUBJECT TO CHANGE WITHOUT  
NOTIFICATION

**WARNING**  
BEWARE OF UNDERGROUND SERVICES  
THE LOCATIONS OF UNDERGROUND SERVICES ARE  
APPROXIMATE ONLY AND THEIR EXACT POSITION  
SHOULD BE PROVEN ON SITE. NO GUARANTEE IS  
GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

DESIGNED  
M.RIMAC  
  
APPROVED BY  
R.HAZELL

DESIGN CHECK  
R.HAZELL  
  
DATE ISSUED  
6 DECEMBER 2022

SCALE  
A3 0 1.25 2.5 5 1:250  
  
CAD FILE NO.  
301401660-01-P21.DWG

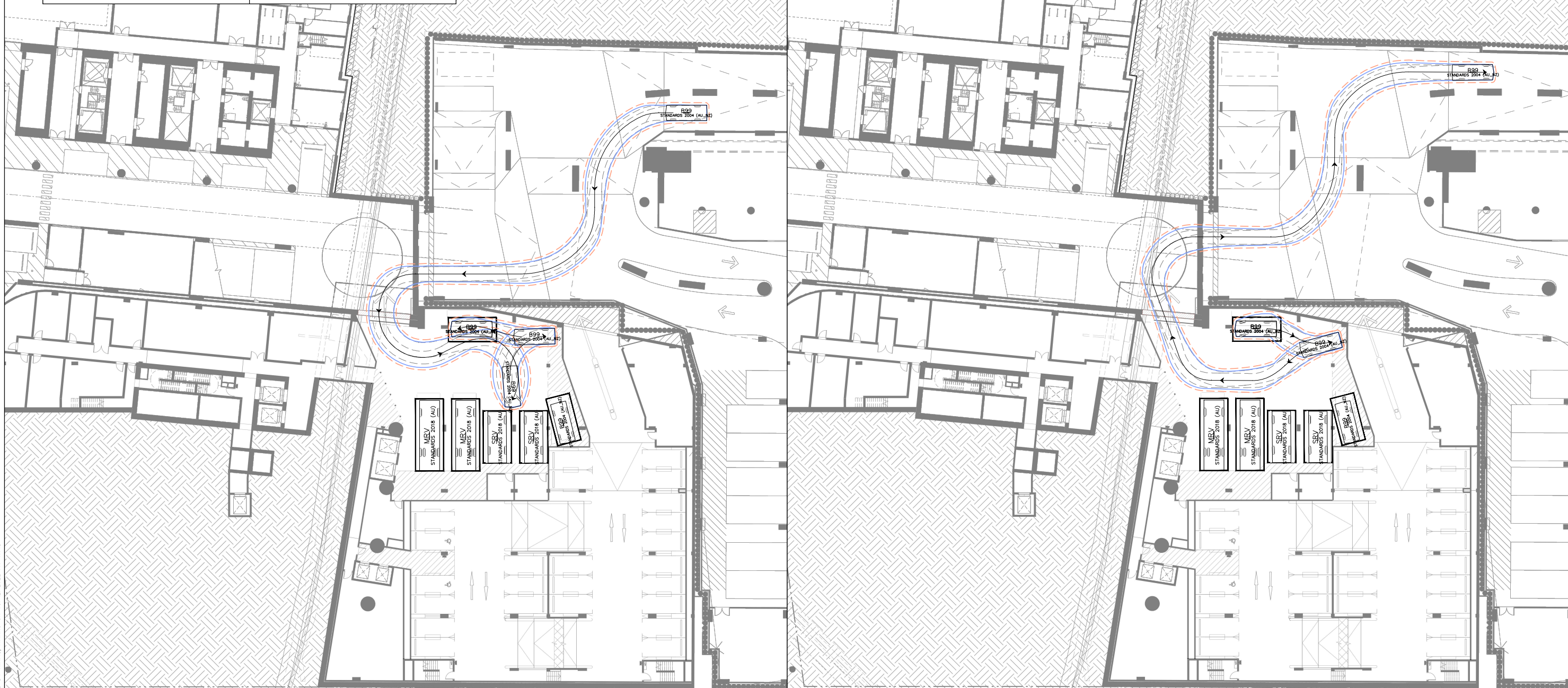
**TOGA CENTRAL**  
**2 LEE STREET, HAYMARKET**  
**LOADING DOCK - DAY 1 SCENARIO**  
**VEHICLE SWEEP PATH ASSESSMENT**  
DRAWING NO. 301401660-01-04 SHEET 04 OF 04 ISSUE P21

ARCHITECTURAL BASE (AS PDF UNDERLAY)  
DRAWING 221125\_RTS B3 alt.pdf  
BY BATES SMART  
DATE RECEIVED 06.12.2022

## A.2 End-State Arrangement



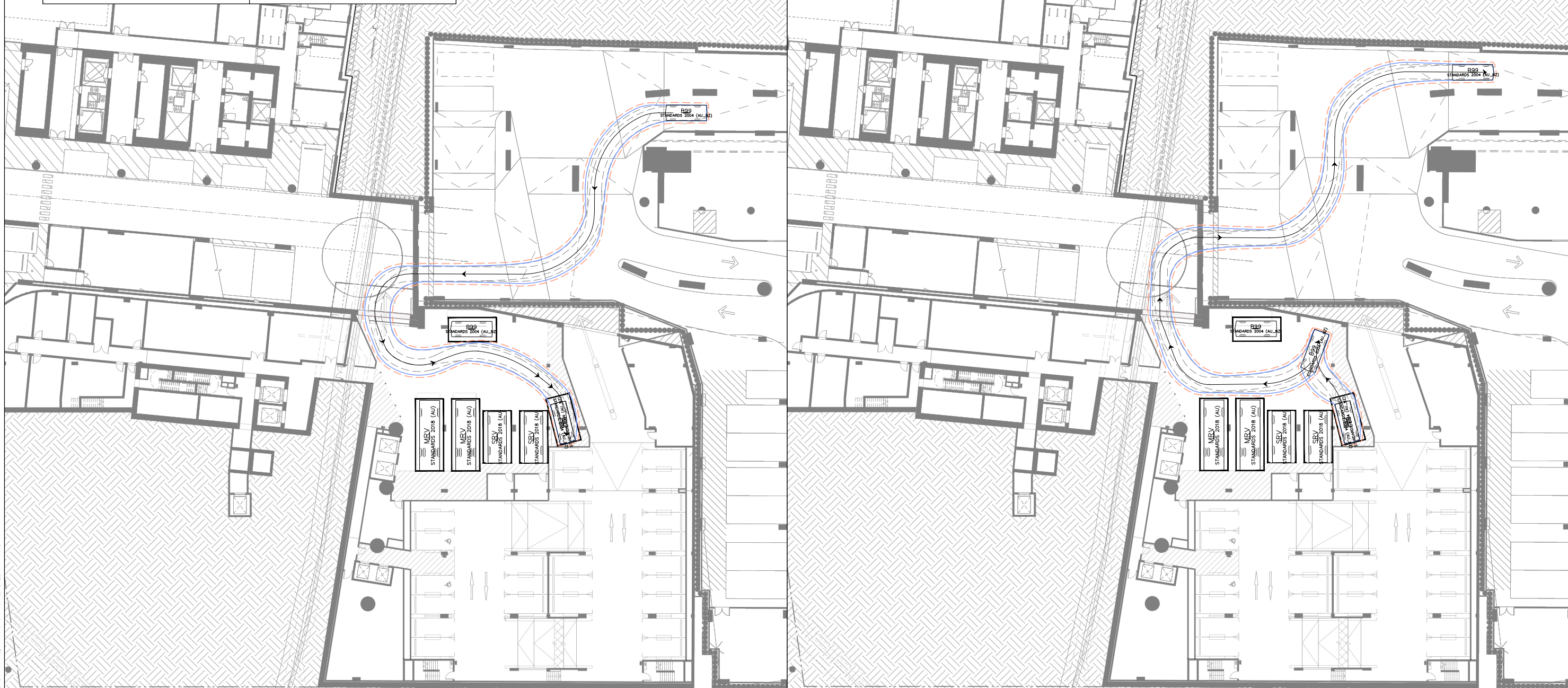




VEHICLE EXIT

|             |                 |       |          |       |     |
|-------------|-----------------|-------|----------|-------|-----|
| DRAWING NO. | 301401660-01-01 | SHEET | 01 OF 05 | ISSUE | P22 |
|-------------|-----------------|-------|----------|-------|-----|





VEHICLE EXIT

ARCHITECTURAL BASE (AS PDF UNDERLAY)  
DRAWING Basement 3\_Precinct Plan.pdf  
BY BATES SMART  
DATE RECEIVED 06.12.2022



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VEHICLE ENTRY

VEHICLE EXIT

ARCHITECTURAL BASE (AS PDF UNDERLAY)  
DRAWING Basement 3\_Precinct Plan.pdf  
BY BATES SMART  
DATE RECEIVED 06.12.2022



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DESIGNED  
M.RIMAC

DESIGN CHECK  
R.HAZELL

APPROVED BY  
R.HAZELL

DATE ISSUED  
6 DECEMBER 2022

SCALE  
A3 0 2.5 5 10 1:500

CAD FILE NO.  
301401660-01-P22.DWG

**TOGA CENTRAL**  
**2 LEE STREET, HAYMARKET**  
**LOADING DOCK - DAY 2 SCENARIO**  
**VEHICLE SWEEP PATH ASSESSMENT**

DRAWING NO. 301401660-01-03 SHEET 03 OF 05

ISSUE P22



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DESIGNED  
M.RIMAC

DESIGN CHECK  
R.HAZELL

APPROVED BY  
R.HAZELL

DATE ISSUED  
6 DECEMBER 2022

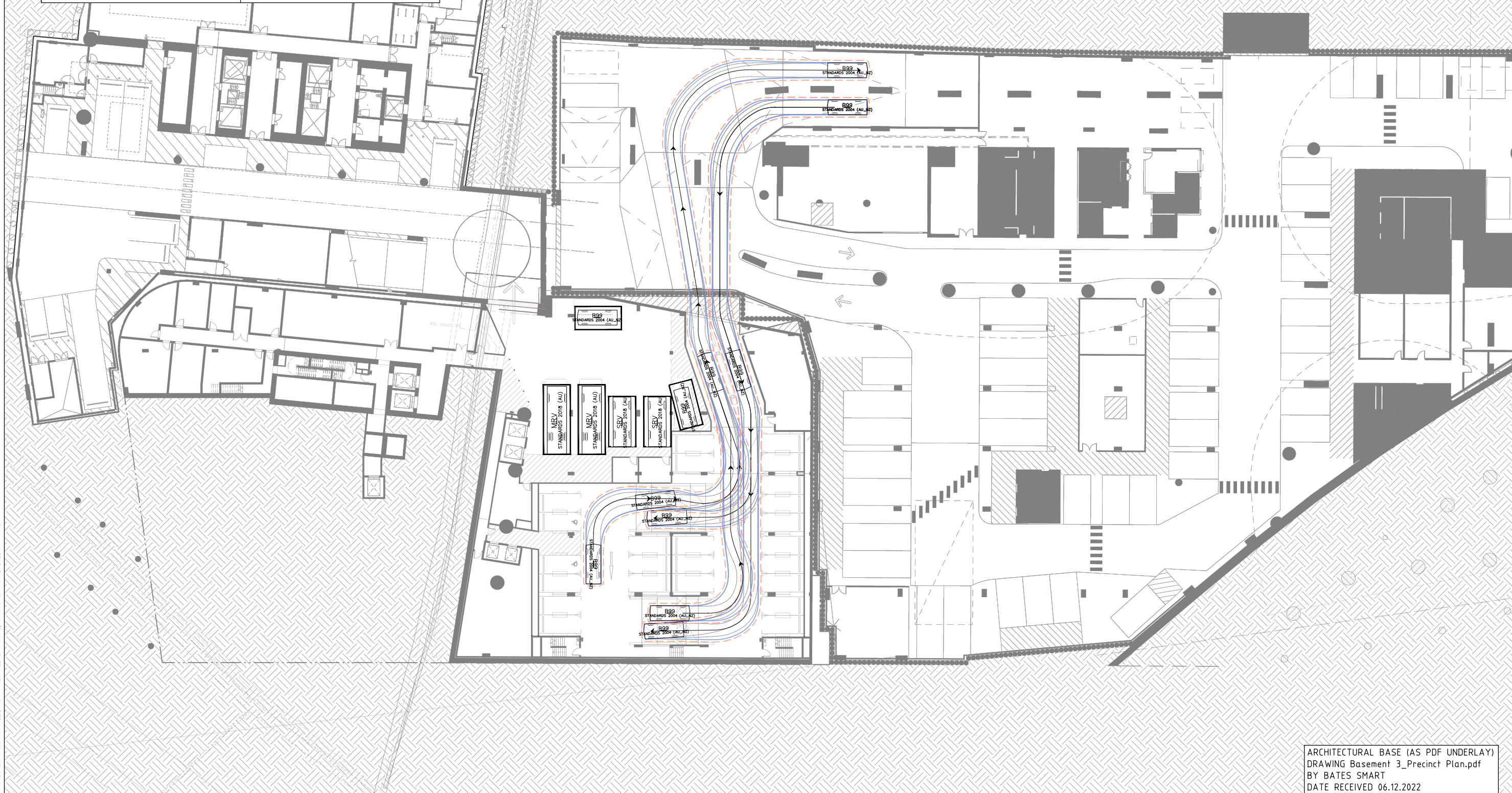
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CAD FILE NO.  
301401660-01-P22.DWG

**TOGA CENTRAL**  
**2 LEE STREET, HAYMARKET**  
**LOADING DOCK - DAY 2 SCENARIO**  
**VEHICLE SWEEP PATH ASSESSMENT**

DRAWING NO. 301401660-01-04 SHEET 04 OF 05 ISSUE P22





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CAD FILE NO.  
301401660-01-P22.DWG

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| DRAWING NO. | 301401660-01-05 | SHEET | 05 OF 05 | ISSUE | P22 |
|-------------|-----------------|-------|----------|-------|-----|