



# **Atlassian Central Station**

Transport Impact Assessment

Prepared for: Atlassian

27 November 2020

#### **PROJECT INFORMATION**

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## 1 Introduction

## 1.1 Background

JMT Consulting has been commissioned by Atlassian (the Applicant) to prepare this transport impact assessment report in accordance with the technical requirements of the Secretary's Environmental Assessment Requirements (SEARs), and in support of the SSD-10405 for a commercial and hotel development above the Former Inwards Parcel Shed at 8 – 10 Lee Street, Haymarket.

The Department of Planning, Industry and Environment (DPIE) issued a list of the Secretary's Environmental Assessment Requirements (SEARs) which inform the Environmental Impact Statement (EIS). Table 1 lists the SEARs that are specific to transport and accessibility.

Table 1 Response to SEARs

SEARs – Transport and Accessibility	Section Discussed	
<b>Operation:</b> The EIS shall include a Traffic and Transport Impact Assessment that includes the following		
accurate details of the current and likely estimated future daily and peak hour vehicle, public transport network, point to point transport, taxis, pedestrian and bicycle movements to/ from the Site	3.1, 6.1, 6.2	
traffic modelling and analysis of the future daily and peak hour vehicle, public transport, pedestrian and bicycle movements likely to be generated by the proposed development and assessment of the impacts on the local road network, including key intersection capacity and any potential need for upgrading or road works (if required)	5.4, 6.2, 0	
an assessment of the operation of existing and future transport networks including rail, bus, Sydney Light Rail, Sydney Metro, pedestrian and bicycle networks and point-to-point transport and coach facilities and their ability to accommodate the forecast number of trips to and from the development	3.3, 5.4, 6.2, 6.4, 6.6	
details of existing and proposed vehicular access arrangements, parking and servicing and an assessment of any potential impacts, such as potential pedestrian, cyclist and bus conflict, considering various design and staging options and impacts for the development of the Site on its own and as part of the Central and Western Gateway Sub-precincts and Central Station ·	3.2, 5.1, 5.2, 5.5	
details of the proposed vehicle, motorcycle, taxi, bus and coach parking, including compliance with parking requirements and justification for the level of parking on the Site ·	5.4, 5.7, 5.8, 5.9	

SEARs – Transport and Accessibility	Section Discussed	
details of the provision and access to bicycle parking facilities (and end of trip facilities) in secure, convenient, accessible areas close to main entrances incorporating lighting and passive surveillance.	5.5, 6.6	
details of emergency vehicle access arrangements ·	5.6	
details of any road and pedestrian upgrades or safety measures required in the vicinity of the proposed development ·	6.7	
initiatives and strategies to encourage employees, guests and visitors to make sustainable travel choices, such as walking, cycling and public transport that support the achievement of State Plan targets ·	7	
<ul> <li>details of loading dock size and accessibility, including:</li> <li>modelling of forecast freight and service vehicle movements, including daily and peak hour volumes</li> <li>proposed management strategies</li> <li>demonstrating that the dock can accommodate all forecast freight and servicing vehicle movements so that these movements do not create localised congestion or detract from the amenity of the surrounding environment.</li> </ul>	5.2 and draft loading dock management plan (provided as a separate standalone document)	
Construction: Include a draft Construction Pedestrian and Traffic Management Plan addressing		
cumulative impacts associated with other construction activities in the area, including any work to Central Station and the Sydney Metro City and Southwest		
peak hour and daily construction and servicing vehicle movements and access arrangements and cumulative impact from surrounding development Sites, on the local road network, public transport services and parking		
construction vehicle routes, hours of operation, works zone location, haulage routes, construction program, access arrangements at all stages of construction and traffic control measures for all works	Contained with draft	
road safety at key intersections and locations subject to heavy vehicle movements and high pedestrian activity	construction pedestrian management plan (provided as a separate standalone	
access arrangements for workers to/from the Site, emergency vehicles and service vehicle movements		
temporary cycling and pedestrian access during construction o likely construction traffic impacts including road / lane closures and diversions, impacts on bus and 'point to point' transport, pedestrian and cycle movement and taking into account other construction activities	document)	
details of proposed mitigation measures should any impacts be identified, the duration of the impacts and measures proposed to mitigate any associated general traffic, public transport, pedestrian and cyclist impacts should be clearly identified		

## 1.2 Description of the Site

The Site is known as 8-10 Lee Street, Haymarket. It is an irregular shaped allotment. The allotment has a small street frontage to Lee Street, however this frontage is limited to the width of the access handle.

The Site comprises multiple parcels of land which exist at various stratums. All the lots are in the freehold ownership of Transport for NSW, with different leasing arrangements:

- Lot 116 in DP 1078271: YHA is currently the long-term leaseholder of the Site which covers the areas shown in blue below.
- Lot 117 in DP 1078271: This is currently in the ownership of TfNSW and the applicant is seeking the transfer of the leasehold on this land to provide for an optimise basement and servicing outcome for the Site.
- Lot 118 in DP 1078271: This is currently in the ownership of TfNSW and
  the applicant is seeking the transfer of the leasehold for part of the air-rights
  above part of this allotment to allow for an optimised building envelope for
  the project. The proposal also uses a part of Lot 118 in DP 1078271 within
  Ambulance Avenue for Day 1 bike access, secondary pedestrian access
  and fire service vehicle access.
- Lot 13 in DP 1062447: This is currently in the ownership of TfNSW but TOGA (who hold the lease for the Adina Hotel) have a long-term lease of this space in the lower ground area.

The Site has an area of approximately 3,764sqm which includes 277sqm of air rights that apply from RL40.

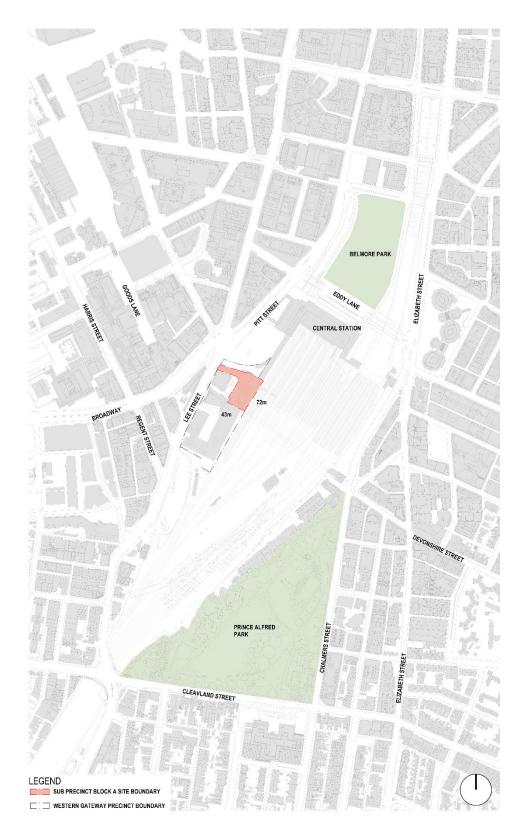


Figure 1 Site context

## 1.3 Site and surrounding context

The Site is directly adjacent to the Western Wing Extension of Central Station, and forms part of the 'Western Gateway Sub-precinct' of the Central Railway Station lands. It is situated between the existing CountryLink and Intercity railway platforms to the east and the Adina Hotel (former Parcel Post Office) to the west.

Existing vehicle access to the Site is via Lee Street, however the Lee Street frontage of the Site is only the width of the access handle.

Current improvements on the Site include the Parcels Shed, which operated in association with the former Parcels Post Office (now the Adina Hotel). The Site is currently used as the Railway Square YHA. The Site also includes the western entryway to the Devonshire Street Pedestrian, which runs east-west through Central Station under the existing railway lines.

The Site is situated in one of the most well-connected locations in Sydney. It is directly adjacent to Central Station Railway which provides rail connections across metropolitan Sydney, as well as regional and interstate connections and a direct rail link to Sydney Airport. The Site is also within close proximity to several educational institutes and is a city fringe location which provides access to key support services.

Central Railway Station is currently undergoing rapid transformation to allow for integration of rail, metro and light rail transport infrastructure. This will elevate the role of Central Station not only for transport but also enhance opportunities for urban renewal and revitalisation of the surrounding precinct. This is one of the key drivers for the identification of the Central SSP and the Western Gateway Sub-precinct to accommodate a new innovation and technology precinct.

The proximity of the Western Gateway Sub-precinct to the city, while still being located outside the core Sydney CBD, provides opportunity for it to evolve to attract technology and innovation companies. It has access to all required services while being sufficiently separate to the CBD to establish a distinct technology industry ecosystem. Its CBD fringe location will provide affordable commercial rents which will support Startups and entrepreneurs which are a key component of an innovation precinct.

## 1.4 Report purpose and structure

The purpose of this report is to outline the transport strategy and document the potential impacts of the future development of the Atlassian Building. It supports the State Significant Development Application for the project by describing existing transport conditions and assessing the potential impacts of the proposal – both during construction and operation. This report has been structured into the following chapters:

- Chapter 1 provides an introduction and overview of the project
- Chapter 2 provides an overview of the relevant policy context and technical guidelines that have informed this assessment
- Chapter 3 details the transport environment around the existing Site
- Chapter 4 provides a description of the proposal
- Chapter 5 describes the proposed access arrangements for the building by all modes of transport
- Chapter 6 provides an operational transport assessment of the future Atlassian Building, including an overview of construction activities
- Chapter 7 provides an overview of the Green Travel Plan to be implemented for the building
- Chapter 8 summarises the key findings of the transport assessment

## 2 Policy Context

## 2.1 Relevant City of Sydney documents

## 2.1.1 Sydney Local Environment Plan 2012

The Sydney LEP 2012 identifies the maximum number of on-Site car parking spaces that can be provided for new developments based on their location and level of transport accessibility. The objective of the car parking rates is to minimise the amount of vehicular traffic generated because of the proposed development.

Clause 7.6 of Sydney LEP 2012 provides that the maximum number of car parking spaces for office and business premises. No public car parking spaces are proposed to be provided as part of the Atlassian development – consistent with the objectives of the LEP.

### 2.1.2 City of Sydney Development Control Plan 2012

The Development Control Plan (DCP) supplements the LEP and provides more detail on provision to assist development. It details the recommended provision for bicycle parking and end of trip facilities within new developments. The future Atlassian building will provide bicycle parking for staff and visitors, with the proposed rate of parking further outlined in Section 6 of this document.

### 2.1.3 City of Sydney Cycling Strategy and Action Plan 2018-2030

The City's (draft) Cycling Strategy and Action Plan commits to making cycling a more attractive and feasible option for more people – with the objective of increasing the bicycle mode share within the City. The document outlines the vision for a connected bike network that is suitable for all ages and abilities improving safety for all users. There are a number of planned local and regional bicycle routes identified in the strategy which staff and visitors of the future Atlassian building can take advantage of.

### 2.2 Relevant NSW Government documents

#### 2.2.1 Future Transport 2056

The Future Transport Strategy is an update of the 2012 Long Term Transport Master Plan for NSW. It is a 40-year strategy, supported by plans for regional NSW and for Greater Sydney. The strategy outlines that transport is an enabler of economic and social activity and contributes to long term economic, social and environmental outcome. The vision for the strategy is built on six outcomes which are

- Customer Focused
- Successful Places
- Growing the Economy
- Safety and Performance
- Accessible Services
- Sustainability

The Atlassian development is consistent with and helps to achieve these outcomes.

#### 2.2.2 Transport for NSW modal strategies

### Sydney's Rail Future

Sydney's rail network was released in June 2012 and provides the strategic framework to transform a 150 year old rail network, as well as a staged plan to achieve that strategy. Sydney's rail network will be modernised in five stages. The document details the proposed future improvements to the rail network servicing Central Station, of which occupants of the future Atlassian building will directly benefit from.

### Sydney's Bus Future

Sydney's Bus Future (Transport for NSW, 2013) provides the framework for improving and delivering more frequent and reliable bus services throughout Sydney. The core aim of the strategy is to provide an integrated bus network with seamless connections to other transport services. The strategy also aims to tailor bus services to customer needs. In this vein, bus services will be focused into three key types, with associated priority and infrastructure investment:

- Rapid routes, which will use priority infrastructure, connect regionally throughout the city and have stops every 800m-1km
- Suburban routes, which will have stops every 400m and have mix of frequent 'turn up and go' and timetabled services
- Local routes, which will complete the network using local streets.

Visitors and staff of the future Atlassian building will take advantage of these improved connections.

#### Sydney's Walking Future

Sydney's Walking Future outlines a strategy to promote walking in Sydney and facilitate more convenient, better connected and safer connections. Key points to emerge from the strategy that are relevant to the project include:

- NSW Government commitment to invest in new walking links that connect people to public transport, including Central Station;
- Prioritisation of investment in walking infrastructure to be prioritised within 2km of centres and public transport interchanges; and
- Commitment to invest in walking facilities as part of the Transport Access Program, including improved circulation spaces around station precincts and safer walking links.

The Atlassian project facilitates enhanced walking connections through to Central Station and the broader Western Gateway precinct, in line with the objectives of this document.

## 2.3 NSW Government technical guidelines

The following documents have been considered in this transport strategy for the future Atlassian Building:

## • RMS Guide to Traffic Generating Developments

Used to inform the traffic assessment undertaken for the project including framework for undertaking the transport impact assessment.

#### NSW Planning Guidelines for Walking and Cycling

This document has been used to inform the development of the walking and cycling measures proposed in this strategy as well as appropriate rates for bicycle parking.

• Guide to Traffic Management – Part 12: Traffic Impacts of Developments (AUSTROADS)

This guide has been referenced for the appropriate methodology to be used for traffic impact assessment of the development.

## 3 Existing Conditions

## 3.1 Current travel patterns

The Bureau of Transport Statistics 'Journey to Work' data set from the 2016 Census data has been used to assess the existing travel patterns of workers employed in the area. Figure 2 summarising this information, demonstrating the high proportion of workers commuting via public transport at 84% (train and bus) due to the availability of public transport. Also, approximately 5% of people working in the precinct use active travel modes - either walking or cycling. Single occupancy private vehicle usage at just 10% - reflecting the strong public transport availability in the area.

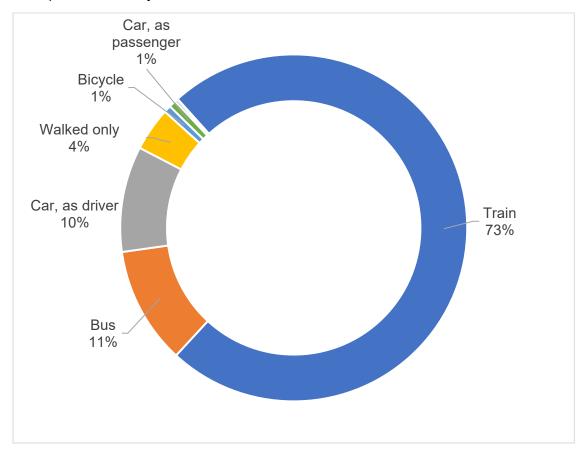


Figure 2 Existing mode share

## 3.2 Vehicle access and parking

The Site shares private vehicular access with drop off for the Adina Hotel, with access via Lee Street to the west of the Site. Vehicular access is via a boom gate with access primarily to Adina hotel drop off, services and staff parking. On-Site parking includes 5 YHA car spaces and space for motorcycle parking. The Site shares parking with Adina Hotel with the provision of 16 car spaces, 3 spaces for adjacent retail stores, and 2 spaces reserved privately. The on-Site parking is predominately for service vehicles, with hotel parking provided in an underground car park accessed via Ambulance Avenue.



Figure 3 Existing vehicle access point

Within Lot 118 on Ambulance Avenue there are approximately 20 parking spaces which are reserved for authorised Transport for NSW vehicles.



Figure 4 Existing parking within Lot 118

## 3.3 Public transport access

The Site is immediately adjacent to Central railway station – Australia's busiest transport interchange. The interchange provides extensive public transport access across Sydney including local trains, buses, light rail services, country-link services, and private buses and coaches.

Figure 5 shows a visualisation of a 15, 30 and 45 minute catchment that can be reached from the Site via. public transport.

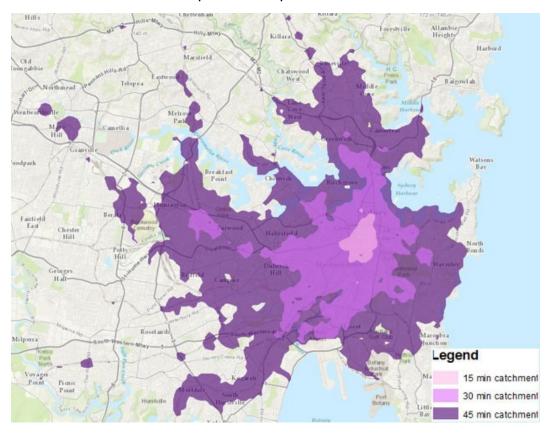


Figure 5 Existing public transport catchment

#### 3.3.1 Rail network

Central Station is located immediately adjacent to the Site with pedestrian connections through the Devonshire Street tunnel. Train services operating at this station include:

- Sydney Trains T1- this connects the City to Emu plains, Richmond and Berowra;
- Sydney Trains T2 this connects the City to Parramatta and Leppington;
- Sydney Trains T3 this connects the City to Liverpool and Lidcombe;
- Sydney Trains T4 this runs from Bondi junction to Waterfall and Cronulla;
- Sydney Trains T7 this connects the City to Sydney Olympic parka and Blacktown;

- Sydney Trains T8 this connects the City to Macarthur via the Airport;
- Sydney Trains T9 this runs from Gordon to Hornsby vis the City;
- Blue Mountains Line;
- Central Coast & Newcastle line;
- South Coast line providing connections to Port Kembla and Kiama; and
- Southern highlands Line providing connection to Campbelltown and Goulburn.

#### 3.3.2 Bus network

The Site is surrounded by an extensive network for bus routes which cover most of the area within approximately 10km radius from the Site as well as some longer distance regional services. This network comprises primarily direct services which serve particular suburbs at their outer extent and then converge on corridors as they approach Central Station. The combined service frequencies on a number of these corridors, such as Oxford Street, Broadway and Victoria Road are in the range of 50 to 120 buses per hour.

The majority of bus services in the area arrive and depart from either Railway Square or Eddy Avenue, which are both within close walking distance of the Site.

#### 3.3.3 Light rail

The Central Station precinct is also serviced by both the CBD and South East and Inner West Light Rail lines. The CBD and South East line rail connects the Site to Randwick and Kingsford, as well as north to Circular Quay through the Sydney CBD. The Inner West light rail runs from Central to Dulwich Hill, with the stop located on the northern side of Central Station at the Grand Concourse. Light rail services typically operate at intervals of between 6-8 minutes throughout the day.

## 3.4 Bicycle network

The existing and planned cycleway network documented in the draft City of Sydney Cycling Strategy and Action Plan is illustrated in Figure 6. This indicates there is an existing local cycling route on Lee Street adjacent to the Site, with a further local route on the Goods Line. The strategy notes that this Goods Line route is planned to be extended to provide enhanced connectivity in future. This route provides wider connection to regional bike routes on Jones Street and Cleveland Street.

The future Atlassian building has a strong opportunity to take advantage of the planned local routes along Lee Street, Cooper Street and Regent Street.



Figure 6 Planned City of Sydney cycleway network

Source: City of Sydney Council

#### 3.5 Pedestrian network

There is a well developed network of pedestrians routes that currently service the Site. The majority of pedestrians currently access the Site via either:

- Devonshire Street tunnel which provides an east-west connection through Central Station; or
- Railway Square which provides access for pedestrians arriving via bus.
   Pedestrians cross Lee Street via an existing mid-block pedestrian crossing or via the Lee Street tunnel and Henry Deane Plaza. The Lee Street tunnel provides connectivity to the broader area including UTS and the nearby Goods Line.

These existing pedestrian connections are illustrated in Figure 7.

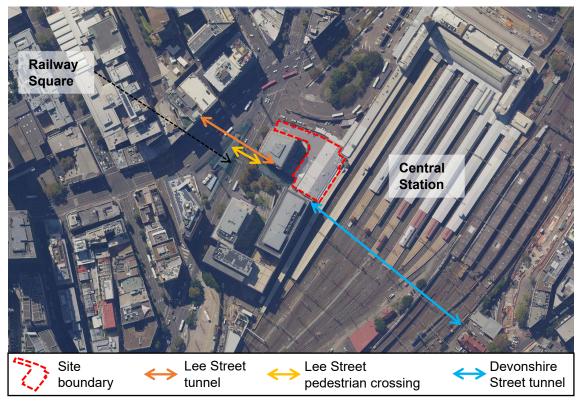


Figure 7 Existing pedestrian connections

There are a well developed network of footpaths in the vicinity of the Site, in particular Lee Street, George Street and Pitt Street. Some existing pedestrian issues in and around the Site include:

- Capacity of Devonshire Street tunnel to move significant volumes of pedestrians during the weekday commuter peak hours, leading to congestion around Henry Deane Plaza
- Long wait times and crossing distances at signalised pedestrian crossings of major roads such as Lee Street, George Street and Broadway.
- There is no dedicated footpath along Upper Carriage Lane which provides access to the Site for pedestrians arriving via Lee Street (see Figure 8).
   Further there is no continuous footpath treatment provided along Lee Street across Upper Carriage Lane which does not emphasise pedestrian priority at this location.



Figure 8 Upper Carriage Lane

## 4 Description of Proposal

The proposed SSDA will facilitate the development of a new mixed-use development comprising 'tourist and visitor accommodation' (in the form of a 'backpackers') and commercial office space within the tower form. Retail, lobby and food and drink premises at the Lower Ground level and Upper Ground level.

Atlassian Central at 8-10 Lee Street will be the new gateway development at Central Station which will anchor the new Technology Precinct proposed by the NSW Government. The new building will be purpose-built to accommodate the Atlassian Headquarters, a new TfNSW Pedestrian Link Zone, and the new Railway Square YHA backpacker's accommodation, in addition to commercial floorspace to support Tech Start-ups.

The new development is to be built over the existing heritage former Inwards Parcels Shed (the Parcels Shed) located on the western boundary of Central Station with the Adina hotel to the west. The works includes a 38-storey mixed-use tower with basement loading dock facilities and end of trip (**EOT**) facilities accessed off Lee Street, 2 storey lobby utilising the Parcels Shed building, lower ground and upper ground retail, YHA hostel and commercial tower with staff amenities to the mid-level and roof top areas and a pedestrian Link Zone works for TfNSW.

The building design has been conceived to support the delivery of a site plan designed to connect with future developments to both the south and east and integrate with a cohesive public realm for the broader Sydney community in accordance with NSW government strategic planning.

The tower design is a demonstration project for Atlassian, representing their commitment to environmental sustainability and contemporary workplace settings through tower form and construction systems along with a set of emblematic outdoor workplaces stacked in the tower form.

The existing Parcels Shed will be adaptively re-used in accordance with best practice heritage process and form the upper level of a 2-storey entry volume that connects visually with the 2 level Link Zone. Over the roof of the Parcels Shed, a new privately owned but publicly accessible landscaped area will be created as the first part of a new upper level public realm that may extend to connect to a future Central Station concourse or future Over Station Development.

The proposed mixed use tower directly adjoins a live rail environment to the east and public domain to the north, west and south. These works will consider these rail environments and have been designed to ensure that all TfNSW external development standards are achieved. This ensures there is no impact to the operation or safety of these TfNSW assets.

Interfaces from the overall site and especially the State works Link Zone have been designed in consultation with the adjoining stakeholders. These stakeholders include TfNSW to the north and south, Toga and the Adina Hotel operator to the west and the Dexus Fraser's site to the south. Connections via the Link Zone, through the basements, and off the proposed new Link Zone dive ramp will be designed to enable existing and future developments to function in both the day 1 scenario and end state when all developers have completed their works.

The overall project aspiration is to create a world class tech precinct with effective pedestrian links through the Atlassian site to the Central Station western forecourt to Central Walk west and adjoining stakeholder's sites.

## 5 Site Access Arrangements

### 5.1 Vehicle access

A two-staged approach to vehicle access is proposed which aligns with the broader development of the Central Station precinct. This staged vehicle access approach is illustrated in Figure 9 and described in the sections below. The staging considers the following:

- 'Day 1' solution: Prior to an integrated basement being delivered as part of the redevelopment of Dexus/Frasers Site. Access to be via a new driveway located off Lee Street at Upper Carriage Lane.
- End state solution: Following the delivery of an integrated basement being delivered as part of the redevelopment of Dexus/Frasers Site, including a single vehicle access point at the southern end of Lee Street.

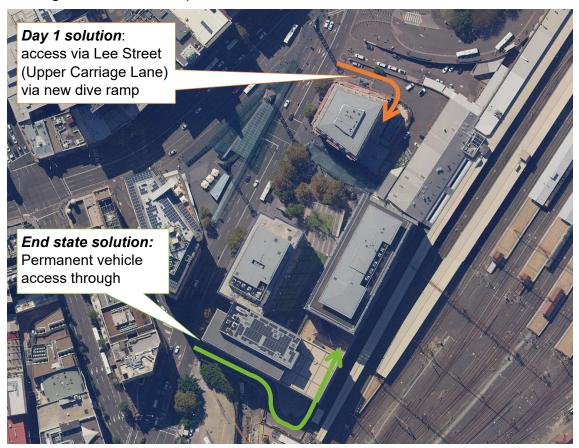


Figure 9 Proposed vehicle access arrangements

#### 5.1.1 Access arrangements – 'day 1' solution

Prior to the redevelopment of Dexus/Frasers Site, vehicle access to the Atlassian building will temporarily be provided via a new dive structure from Lee Street located at Upper Carriage Lane (existing access point to YHA). This dive structure will also service the Adina hotel car park, given the existing vehicle access point on Ambulance Avenue will close following the pedestrianisation of Ambulance Avenue.

The dive structure ramp would grade down from Lee Street and provide access to the existing Adina Hotel car park (Level B1) and the Atlassian loading dock (Level B2).

The ramp has been designed so that a medium rigid vehicle (MRV) can pass a small rigid vehicle (SRV) at all locations on the ramp. Around the corner of the ramp between levels B1 and B2 there is insufficient width for two MRVs to pass one another at the same time. While the likelihood of this situation occurring is relatively low, vehicles travelling up the ramp and exiting the Site will be required to stop and view any oncoming vehicles travelling down into the loading dock (through the installation of mirrors). MRVs exiting the Site will be required to wait to allow the entering MRV to turn the corner and safely pass them, before proceeding up towards Lee Street.

The gradient of the main ramp is 1 in 6.5 at it's steepest point which is in accordance with AS2890.2, with a 1:10 transition for 5m at the end of the ramp. This will ensure that the clearance for the design vehicle (3.6m) is achieved. A 6.42m clear width will be provided within the link zone, which will be used by service vehicles accessing the Atlassian or Adina loading docks on Level B2.

A 1:20 gradient for the first 6m from the edge of the property boundary has been provided in order to achieve appropriate sight distances for drivers to view pedestrians walking along Lee Street.

It should be noted that in the event that the integrated basement option (end state access solution) does not proceed, this interim access solution has the ability to accommodate expected traffic movements for the Atlassian building for the life of the building.

The vehicle access arrangements under the interim solution are shown in Figure 10 below.

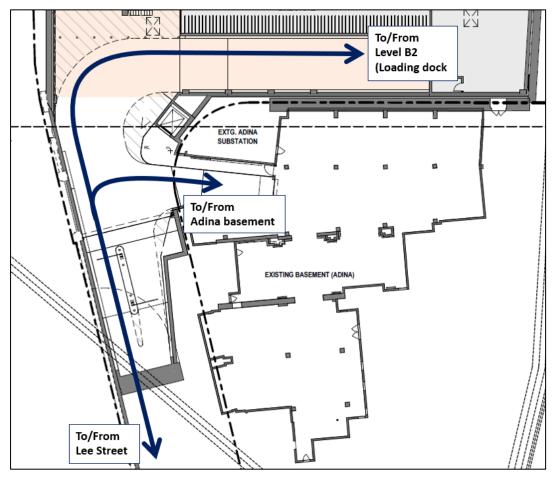


Figure 10 Access arrangements - 'day 1' solution

#### 5.1.2 Access arrangements – end state solution

Under the end state arrangements, access for all vehicles will be via a new connection as part of the proposal for the development of the Dexus/Frasers Site into a large scale mixed-use development. Vehicle access from the adjacent road network would be via the southern end of Lee Street at the existing driveway located opposite Little Regent Street (previously shown in Figure 9). This driveway currently services the buildings located in Henry Dean Plaza and would act as the singular access point for vehicles in the wider Central Station precinct. Vehicle access for the Adina hotel would also revert to this new connection. A connection point between the Dexus/Frasers Site basement and Atlassian Site basement will be provided to facilitate seamless movement of vehicles between the two Sites.

The existing dive ramp structure on Lee Street would be modified to not permit any vehicular access following the introduction of the end-state access solution. Instead this would solely provide access for cyclists entering the Atlassian building end of trip facility area.

## 5.2 Driveway design principles

To emphasise pedestrian priority along Lee Street during the interim access arrangements, the driveway entrance is to be fully integrated with the adjoining footpath, at one continuous level. The treatment will therefore be an area which is designed for pedestrians, across which vehicles can pass slowly. Drivers of vehicles will be guided and encouraged to give way to pedestrians on the footpath as required by law. The crossings would also be designed with consistent pavement material.

Other than promoting drivers to give way to pedestrians, the driveway has been designed to balance ease of vehicles in utilising the driveway with minimisation of pedestrian crossing distances, including minimising the crossover distance on Lee Street to 5.5m as per the recommendations from City of Sydney.

The photographs below illustrates the Westin Hotel porte-cochere in Pitt Street south of Martin Place. This provides a good example of a driveway crossover located on a street with high pedestrian activity that works well in busy periods.







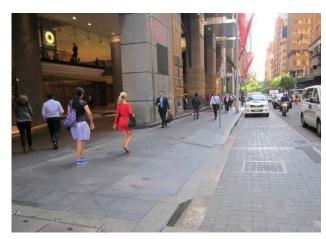


Figure 11 Westin Hotel porte cochere entrance

## 5.3 Loading dock

#### 5.3.1 Demand

To determine the appropriate number of vehicles to accommodate within the loading dock, research undertaken by Arup in 2018 has been referenced. This Arup research led to the development of relationship between GFA and loading dock peak hour vehicle movements (shown in Figure 12). While the level of loading activity is dependent on a number of factors and not simply the GFA of the building, this does provide a useful forecasting tool when assessing the loading and servicing requirements for planned office buildings.

Given the Atlassian development proposal is expected to have approximately 70,000m<sup>2</sup> GFA, approximately 20 loading dock movements are anticipated during the peak hour. The design proposes to provide a total of nine service vehicle bays within the loading dock. This provision (at a turnover rate of approximately 20 minutes) is therefore sufficient to accommodate the loading and servicing demands during peak hours.

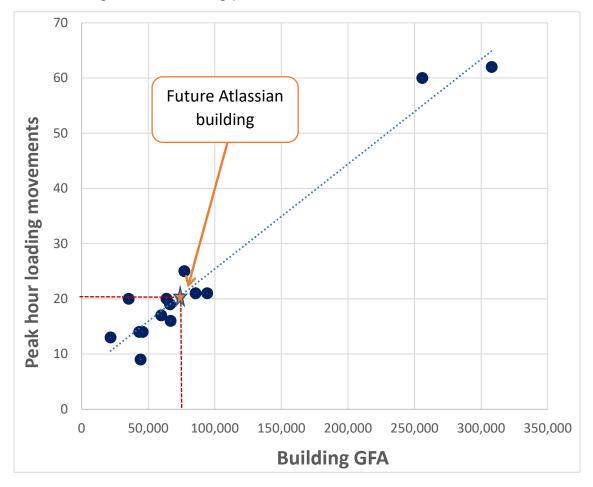


Figure 12 Relationship between building GFA and peak hour service vehicle activity Source: Arup, 2018

#### 5.3.2 Design and layout

The current design proposes to provide a total of nine service vehicle bays within the Atlassian loading dock (see Figure 13), comprising of:

- Two bays for medium rigid vehicles (MRVs)
- Three bays for small rigid vehicles (SRVs)
- Four bays for vans / courier vehicles

In the interim state a vehicle turntable is required to allow vehicles to enter and exit the loading dock in a forwards direction. Smaller trucks and vans will not be required to use this turntable, only larger MRVs which have larger turning circles that don't have the ability to turn around in the available space.

The Atlassian loading dock has been designed in accordance with Australian Standard AS2890.2 -2002 Off-street commercial parking facilities. The facilities have been designed for use by 8.8m long MRV delivery vehicles with a travel and minimum operational height clearance of 3.6m. Within the central link zone area an operational clearance height of 4.5m is provided which is in accordance with the requirements of Transport for NSW.

The loading dock design also makes provision for servicing for TOGA including the Adina Hotel, including one MRV bay and two van / courier spaces in the north-west corner of the Site. A goods lift is located immediately adjacent to the loading dock which will be used to transfer goods to Level B1.

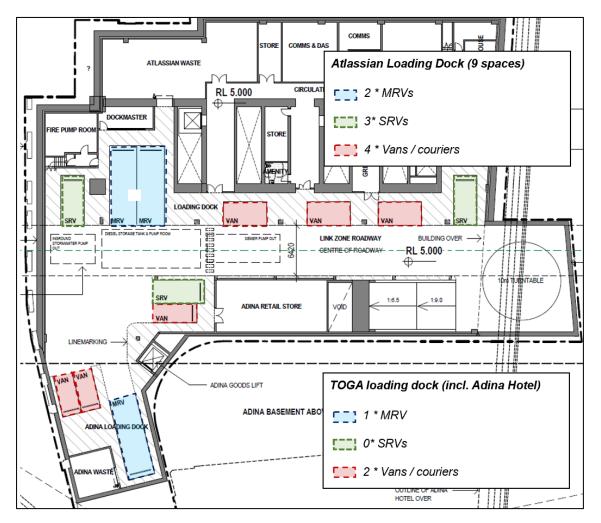


Figure 13 Loading dock layout

#### 5.3.3 Loading dock management

The loading docks within the Site have been designed to accommodate the anticipated level of vehicle demand generated throughout the day.

It is envisaged the on-site management of the loading dock will consist of a combination of an on-Site dock manager and a dock management system (DMS). The DMS will enable the on-site management team to scheduled truck delivery times and allocate docks.

Trucks intending to use the docks will not be permitted to come to Site without making a booking beforehand. The major benefit of the implementation of such a system is the ability to moderate demand throughout the day. The allocation of deliveries to timeslots (with strict length of stay limits) reduces the risk the loading dock reaching capacity and manages traffic flow into the Site during peak periods. The booking system also largely mitigates the risk of vehicle queues forming to enter the Site and improving the flow of traffic on the adjacent streets.

Access to the loading dock will be controlled via a boom gate system to be located on the new Lee Street dive structure ramp. Access will be granted only to those vehicles that are booked via the loading dock booking system. Signage to this effect will be displayed prominently at the loading dock entrance to deter entry attempts by unbooked vehicles. Unauthorised vehicles or vehicles without a booking will be instructed by the dockmaster to exit the site immediately.

Further details around the management of the loading dock, as well as vehicle swept path analysis into and out of each parking space, is provided in a preliminary loading dock management plan submitted as part of this application.

## 5.4 Point to point transport

As previously noted drop off and pick up for the Adina Hotel currently occurs on Upper Carriage Lane adjacent to the building. With the introduction of the new Lee Street dive ramp to facilitate access to the Atlassian loading dock and Adina hotel car park, alternative arrangements for drop off and pick up for hotel guests (as well as Atlassian visitors) will be required. Providing a convenient drop off and pick up area for hotel guests and visitors of the Central Station precinct is important to manage the demands on the transport network and ensure this activity does not occur in areas that would adversely impact public transport (e.g. bus zones) or traffic capacity (e.g. no stopping zones). Further, hotel guests with large pieces of luggage, particularly those with reduced mobility, require this drop off / pick up area to be within close proximity of the hotel entrance.

Providing drop off within the Site boundary was investigated but determined not to be feasible given:

- The constrained basement layout of the Adina Hotel not facilitating convenient access and manoeuvring for point to point transport vehicles
- Bringing point to point vehicles through the Site would add to conflicts between Atlassian service vehicles, cyclists accessing the end of trip area and general traffic utilising the Adina hotel car park
- It does not provide a long term solution as the Lee Street dive ramp structure will be closed to vehicular traffic following the redevelopment of the Dexus/Frasers Site

A solution has been developed which services the drop off and pick up requirements of the Adina Hotel and also for the broader Central Station precinct. This solution proposes to introduce a 'No Parking' zone on Lee Street immediately adjacent to the Adina Hotel as shown in Figure 14. This No Parking zone can service both taxis as well as other ride-share vehicles. The regulatory 10m No Stopping zone has been provided in this layout to comply with standard Transport for NSW requirements around no stopping distances adjacent to traffic lights. This area can accommodate up to four vehicles at any one time.

The area would be used only for short term drop off and pick up which promotes high turnover of vehicles. Taxis would not be allowed to 'rank' and remain parked for long periods of time, allowing the area to be efficiently utilised throughout the day. No other existing kerbside uses would be impacted by this proposal, with buses still able to access to the bus zone on Lee Street south of the existing pedestrian crossing.

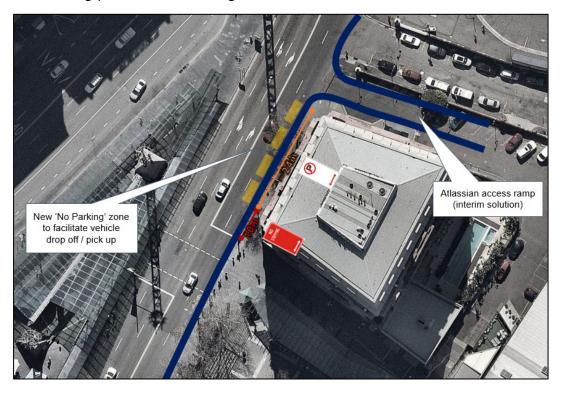


Figure 14 Proposed Lee Street drop off / pick up zone

To understand the traffic implications of introducing a drop off / pick up area on Lee Street similar to that indicated in Figure 14, a SIDRA traffic model has been developed. This traffic model utilises traffic volumes collected in May 2018 for the broader Central Station precinct. The data indicated that the PM peak hour was the most critical in terms of southbound traffic movements, with 310 vehicles recorded in this direction over one hour. The results of the modelling are illustrated in Figure 15 and show that the maximum queue length on Lee Street will increase by approximately 25m as a result of reducing the number of southbound lanes down from two to one. Importantly however the maximum queue length is not forecast to extend back to or impact the operation of the adjacent Lee Street / Pitt Street / George Street intersection. The operation of the Lee Street traffic signals themselves are not forecast to change following the introduction of the drop off / pick up zone.

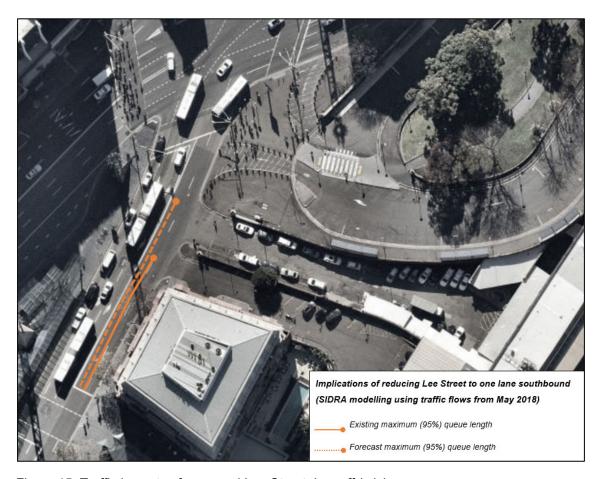


Figure 15 Traffic impacts of proposed Lee Street drop off / pick up zone

## 5.5 Bicycles

The main access to the bicycle parking and end of trip facilities within the Atlassian building will initially be via a dedicated connection on Ambulance Avenue as shown in Figure 16 below. The bicycle parking and end of trip facilities area are located on Level B1, with cyclists to access the area through a set of doors and sealed corridor. Showers, lockers and change room facilities are also located on this level.

Following the completion of the Dexus/Frasers Site and delivery of an integrated basement solution ('day 2'), the access point for cyclists will via revert to the Lee Street dive ramp which will be for the exclusive use of cyclists only. This will provide a high quality access solution for cyclists accessing the end of trip area within the building. An alternative entry point may also be retained through the northern heritage wall along Ambulance Avenue.

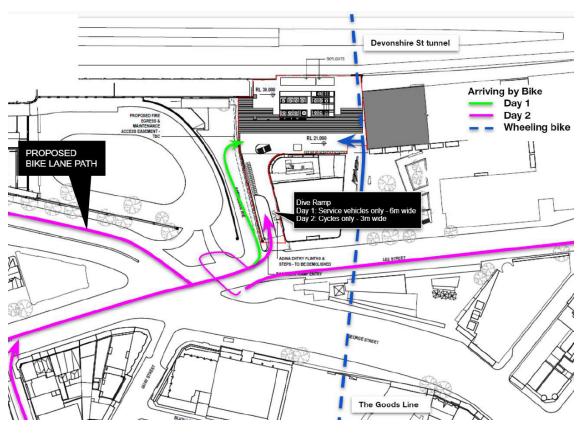


Figure 16 Cyclist access arrangements

## 5.6 Emergency vehicles

In the case of emergency, ambulances and fire tenders will be able to use the kerbside lane along Lee Street or if required access the upper ground level at RL 21 via the pedestrian pathway adjacent to the Adina Hotel.

## 5.7 Car parking

Given the location of the building immediately adjacent to Central Station with high levels of public transport accessibility, no car parking is proposed to be provided for the use of Atlassian staff or visitors as part of the development. A small number of existing at-grade car parking spaces located at Upper Carriage Lane will be relocated into the basement – at this stage of the design approximately eight spaces are to be provided in the link zone under the B2 ramp. Therefore the overall number of car parking spaces provided as part of the development will represent a reduction compared to existing conditions.

## 5.8 Coach parking

The development will not generate demand for any coaches and therefore no provision for this vehicle type has been made within the design.

## 5.9 Motorcycle parking

Consistent with the approach not to provide any staff car parking as part of the proposal, no on-Site motorcycle parking is proposed.

## **6 Transport Impact Assessment**

#### 6.1 Forecast mode share

A target mode split for the proposal has been set and is presented in Figure 17. Similar to existing travel patterns, more than half of employment trips in the precinct will travel by Train/Metro (75%), with travel by bus (10%) having the second highest mode share. Walking and cycling are both anticipated to have a mode share of 5%.

Although no car parking spaces will be provided for staff of the Site, a small amount of employees are expected to continue to drive, parking in neighbouring parking lots, rented spaces or at peripheral park and ride locations.

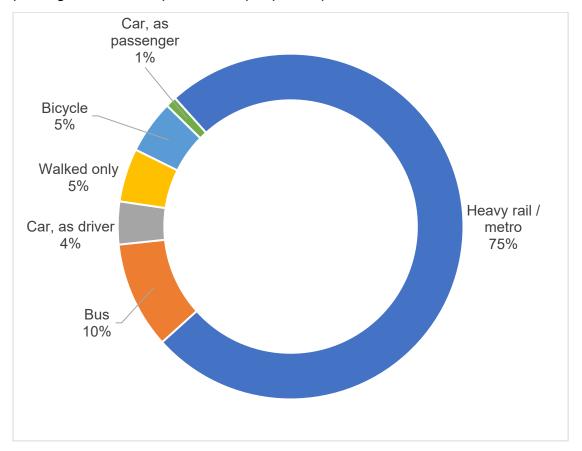


Figure 17 Forecast future mode share

#### 6.2 Travel demand

Table 2 summarises the forecast number of trips (all modes) made to the future Atlassian development over the following time periods:

- AM peak period (6.30am 9.30am)
- AM peak hour (8am 9am)
- Daily<sup>1</sup>

The Atlassian Site is anticipated to accommodate approximately 4,000 staff on a typical day, with a further 60 staff associated with the YHA building. This level of occupancy may generate approximately 2,030 trips during the morning peak hour. As shown in Table 2, the majority of additional employee trips generated by the proposal will be accommodated using sustainable modes.

Table 2 Total trips generated by proposal

Mode	Mode	Future trip generation		
	split	AM peak period (6.30am – 9.30am)	AM peak hour (8am – 9am)	Daily
Heavy rail / metro	75%	3,045	1,523	10,150
Bus	10%	406	203	1,353
Car, as driver	4%	162	81	541
Walked only	5%	203	102	677
Bicycle	5%	203	102	677
Car, as passenger	1%	41	20	135
Total	100%	4,060	2,030	13,533

<sup>&</sup>lt;sup>1</sup> The estimated future daily trips is based on surveys undertaken by Transport for NSW which indicates that trips generated during the AM peak hour account for approximately 15% of the daily number of person trips.

#### 6.3 Traffic generation and road network impacts

As noted in Table 2, it is expected the development may generate up to 81 vehicle trips during the AM peak hour. These trips will be dispersed however across a number of neighbouring public car parking lots in the Haymarket area, and therefore would not adversely impact the road network. As previously noted the Atlassian proposal actually results in a reduction in the number of car parking spaces on-Site due to the removal of existing parking outside the front of the YHA.

Other developments in the Central Station precinct are anticipated to adopt a similar approach to on-Site car parking numbers as that adopted by Atlassian – i.e. zero or minimal spaces for staff and visitors.

As part of the transport assessment undertaken for Block B in the Central Station precinct (Dexus/Frasers Site), Arup undertook traffic modelling which considered the increased loading / servicing requirements for the entire Western Gateway sub-precinct (including the Atlassian building). The traffic modelling was based on no additional car parking being provided in the precinct for staff or visitors.

The traffic modelling considered the operation of the Lee Street / Regent Street intersection during the morning and evening commuter peak hours. This intersection will, under the preferred permanent access arrangement (described in Section 5.1) accommodate all vehicle access and egress to both Block A (Atlassian Site) and Block B (Dexus/Frasers Site). The modelling demonstrated that this intersection would perform satisfactorily at Level of Service B in both peak hours.

Therefore cumulative traffic impacts arising from the redevelopment of the precinct are expected to be minimal.

#### 6.4 Pedestrian movements

The proposal provides for improved pedestrian connectivity and permeability in the precinct. Key features include:

- Vertical transportation from lower ground to upper ground to facilitate access to the building
- Potential connections to over-rail concourse and future metro egress
- Through site connections to Henry Deane Plaza

More broadly the Central Station precinct envisages significant enhancements to the pedestrian network which will enhance accessibility to the future Atlassian building. This includes:

- The opening of the Sydney Metro Central station and the associated 'Central Walk' connection between Ambulance Avenue and Chalmers Street. The walk will connect new light rail services to the new Sydney Metro platforms and existing Sydney Trains platforms. It is expected that Central Walk will largely replace the Devonshire Tunnel as the main access point for rail-based pedestrian trips to the Site. Central Walk will relieve existing capacity constraints at Devonshire Street tunnel (as noted in Section 3.5) and provide a direct connection through to the future Atlassian building (Block A).
- Pedestrianisation of Ambulance Avenue which becomes an extension of Central Walk. Vertical transport will be provided on Ambulance Avenue which will provide pedestrians with a direct connection through to the future Atlassian building.
- At-grade pedestrian-only connection between Central Walk West and Devonshire Street tunnel, located immediately adjacent to the future Atlassian building. This link provides a connection between Block A (Atlassian Site) and Block B (Dexus/Frasers Site)

Future pedestrian movements through and around the Site, taking into consideration the improvements noted above, are illustrated in Figure 18.

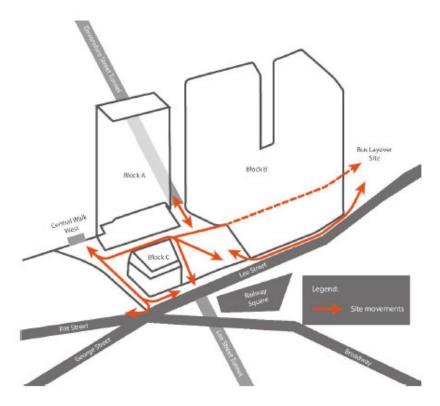


Figure 18 Future pedestrian movements in the Central Station precinct Image Source: Arup (2019)

Following the development of the precinct access to the Atlassian building will primarily be via the following routes:

- Central Walk connection with vertical transport provided via Ambulance Avenue, for passengers arriving via the Sydney Metro network, suburban rail network or Sydney Light Rail;
- Devonshire Street tunnel for passengers arriving via the suburban rail network; and
- Lee Street pedestrian crossing for passengers arriving via bus at Railway Square.

The existing Lee Street surface footpath will form a secondary access route to the building, with connections through the redeveloped Henry Deane Plaza.

These future pedestrian connections through to the Site are shown in Figure 19.

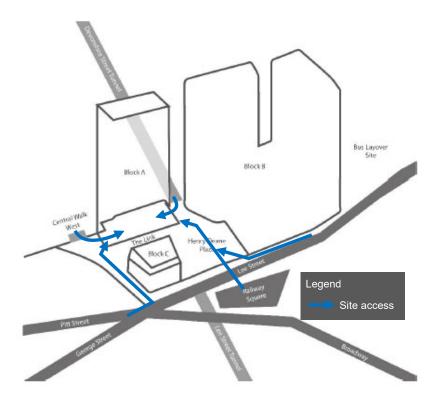


Figure 19 Future pedestrian access to Atlassian building Image Source: Arup (2019), modified by JMT Consulting

# 6.5 Public transport

As previously noted, the Site is strategically located directly adjacent to Central Railway Station, which is undergoing rapid transformation by the NSW State Government to allow for the integration of rail, metro and light rail transport infrastructure to improve connectivity in Sydney.

Sydney Metro City and Southwest is currently under construction which will introduce a metro station at Central Station. The station is to be accessed via the existing northern station entry from Eddy Avenue and main northern concourse. The new metro platforms will provide an interchange for suburban, intercity and regional rail services, with buses, coaches and light rail.

As outlined in Section 6.2, the development will generate approximately 1,523 additional Train/Metro trips and 203 bus trips during the morning peak hour. The Sydney Metro network, along with signalling and infrastructure upgrades across the existing Sydney rail network is anticipated to increase the capacity of train services entering the CBD – from about 120/hr today to 200 services beyond 2024. Considering the significant increase in capacity, the impact of the development on public transport capacity is considered acceptable.

### 6.6 Cycling

### 6.6.1 Approach routes

Based on the existing and future network of cycling routes, the most likely approach and departure routes for cyclists accessing the future Atlassian building are summarised in Figure 20 and described below:

- From the north: Via Castlereagh Street cycleway, Belmore Park and Pitt Street onto Lee Street
- From the south: Via George Street cycleway, Cleveland Street and local bicycle routes on Regent Street and Lee Street
- From the east: Via future planned regional bicycle route on Cooper Street, with cyclists likely to dismount at Central Station and walk their bikes through Devonshire Street tunnel
- From the west: Via the Goods Line connection which connects with a broader network of cycleways

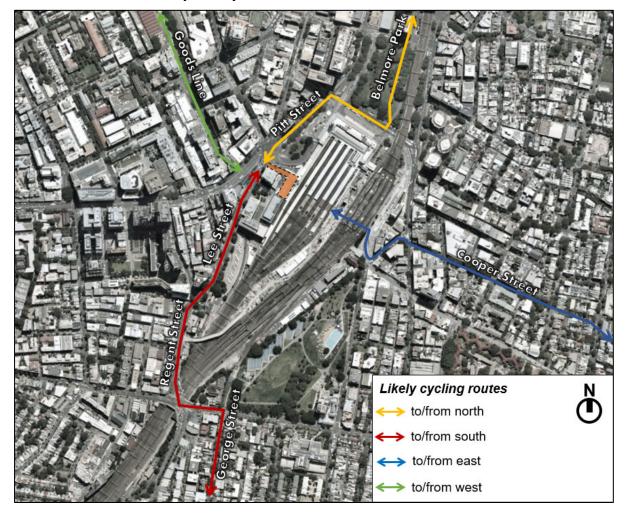


Figure 20 Potential cyclist approach routes

#### 6.6.2 Building access

As previously noted, the main access to the bicycle parking and end of trip facilities within the Atlassian building initially be via a dedicated connection on Ambulance Avenue. Following the completion of the Dexus/Frasers Site and delivery of an integrated basement solution the access point for cyclists will via revert to the Lee Street dive ramp which will be for the exclusive use of cyclists only. An alternative entry point may also be retained through the northern heritage wall along Ambulance Avenue.

#### 6.6.3 Bicycle parking / end of trip facilities

#### Staff

The proposal will include a large bicycle parking and end of trip area located on Level B1 for use of staff. The development proposes to provide 336 bicycle parking spaces which will be Class 2 secure bicycle spaces as per the Australian Standards requirements. 336 bicycle parking spaces are to be provided which is equivalent to approximately 8% of the number of regular staff on site – in excess of the 7.5% rate noted by the Green Building Council of Australia for six star Green Star buildings. It is well above the current bicycle journey to work mode share to the Central Station area of approximately 1%, as previously identified in Section 3.1 of this document.

Therefore the bicycle parking proposed has made allowance for significant growth in cycling usage by staff compared with current levels. The proposed provision is considered appropriate given the location of the development in the CBD and the very high levels of accessibility by public transport (i.e. metro, heavy rail, bus and light rail).

End of trip facilities will be provided at the following rates outlined in Table 3, consistent with relevant green star requirements:

Table 3 Bicycle parking and end of trip facility provision

Item	Rate	Proposed provision
Bicycle parking	8% of regular building occupants	336 spaces
Lockers	1.2 per bike parking space	403 lockers
Showers	8 for first 500 regular occupants plus 2 per extra 250 occupants	37 showers (18 male, 18 female and 1 unisex disabled)

#### **Visitors**

It is expected that between 1% and 2% of total visitors to the future Atlassian building will arrive by bicycle. The majority of visitors will be residents and office workers in nearby CBD buildings and interstate/international visitors— all of which are unlikely to cycle. At peak times of the day there may be up to 500 visitors in the building. Based on this mode share range, approximately 5-10 bicycle spaces are to be provided — lower than the number that would be required under the City of Sydney DCP 2012.

As part of the development proposal approximately 30 visitor bicycle parking spaces are to be provided within the public domain. Initially under a 'Day 1' solution these spaces will be provided within the lower ground link zone as shown in Figure 21.

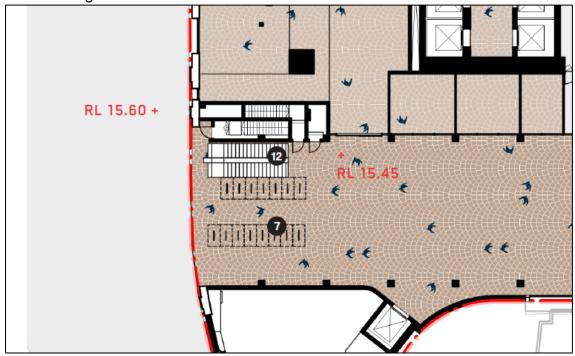


Figure 21 Visitor bicycle parking - Day 1

From Day 2 onwards, the Lower Level Link Zone becomes a major pedestrian connection, linking Central Walk West and Henry Deane Plaza. As a result these visitor bicycle parking spaces could be relocated to two locations, those being in the lower ground level (Figure 22) as well as the upper ground link zone (Figure 23). Cyclists accessing the upper ground link zone from Lee Street will be required to dismount and walk their bikes up the pedestrian path adjacent to the Adina hotel entry, consistent with other footpath areas in Sydney. Access to the bike parking on the lower ground level will be achieved through an existing entry in the heritage wall. The final location of visitor bicycle parking spaces will be confirmed with Transport for NSW during the detailed design phase of the project.

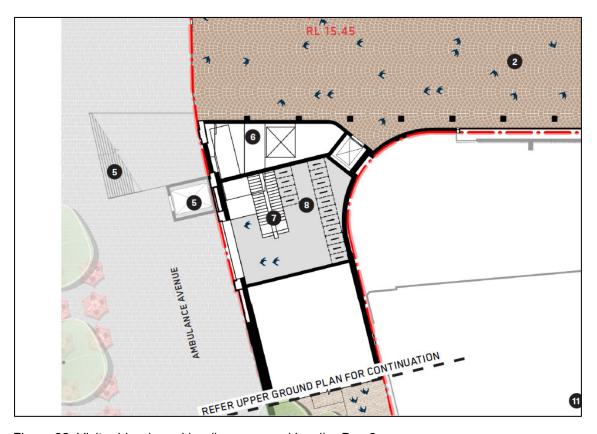


Figure 22 Visitor bicycle parking (lower ground level) – Day 2



Figure 23 Visitor bicycle parking (upper ground link zone) – Day 2

### 6.7 Road safety

No impacts to road user safety are expected given:

- No on-Site parking is to be provided as part of the proposal;
- Pedestrian priority along Lee Street during the interim access arrangements will be emphasised with the vehicle driveway entrance to be fully integrated with the adjoining footpath, at one continuous level; and
- The improvement to pedestrian access and circulation as proposed as part of the project; and
- Staff and visitors are to be encouraged to use sustainable transport modes as described in Section 7 of this document.

#### 6.8 Construction

A preliminary Construction Pedestrian Traffic Management Plan (CPTMP) has been prepared for the project and is provided as a separate standalone document supporting this application. The CPTMP considers items such as:

- Interface with existing operations for the Adina Hotel, and strategies to minimise impacts to this building during construction of the Atlassian Building
- Heavy vehicle movements to and from the Site
- Likely access routes for vehicles
- Pedestrian management measures required during construction
- Workzone / hoarding locations
- Impacts to on-street parking (if any)
- Appropriate access points for construction vehicles
- Parking requirements for workers
- Cumulative impacts with consideration to adjacent construction projects around Central Station, including Sydney Metro and neighbouring properties

The development of this plan is ongoing, in consultation with Transport for NSW (Sydney Coordination Office) and will be updated following the appointment of a contractor to the project.

# 7 Green Travel Plan

#### 7.1 Overview

Atlassian are acutely aware of the importance of facilitating and encouraging travel to and from the workplace by alternative modes to private car. With around 4,000 employees expected to be working in the building, there will be a need to implement a Travel Plan which will encourage employees to travel by sustainable modes.

Given the lack of staff parking, central location, high levels of public transport accessibility and quality of proposed end of trip facilities, the development is ideally placed to achieve the future travel mode share targets set out in this document.

The travel plan will promote commuting and business trips by walking, cycling and public transport and outline incentives which promote the use of these modes. The lack of parking provided as part of the development will, in itself, discourage employees from travelling by private car.

It is envisaged that regular staff travel surveys will be undertaken as part of the monitoring programme and to obtain feedback.

### 7.2 Objectives

The main objectives of the travel plan are to reduce the reliance on private vehicles and promoting sustainable means of transport to the Site. The more specific objectives include:

- High modal share for public transport, cycling and walking journeys for staff and visitors:
- To ensure adequate facilities are provided at the Site to enable users to travel by sustainable transport modes
- To raise awareness of sustainable transport amongst users

The travel plan for the Site responds to these objectives by:

- Promoting alternative travel modes to the car to encourage increased public transport, walking and cycling usage;
- Reducing the environmental impact associated with vehicle movements by raising travel awareness and encouraging travel by more sustainable transport modes, to reduce private car usage;
- Connecting the Site to the surrounding community by the strong promotion of walking and cycling, thus minimising the impact on the adjacent road network;
- Improving health and wellbeing;
- Promoting public transport connections in the area including bus services;

#### 7.3 Forecast mode shares

Having regard for existing travel behaviours, the public transport availability (including the future Sydney Metro services), as well as the proposal not to provide any public car parking for the Site, mode share forecasts have been developed for travel to the Site as noted in Table 4.

Table 4 Forecast mode shares

Mode of Travel	Forecast Mode Share
Private vehicle (driver)	4%
Private vehicle (passenger)	1%
Public transport	85%
Walking or cycling	10%

# 7.4 Potential green travel plan measures

An overview of the potential measures proposed are described in Table 5. The measures listed are not exhaustive and may change with time, and as a living document the Travel Plan will require the periodic updating of the list of measures based on the outcomes of the monitoring to be undertaken. It will generally be the responsibility of the tenants to implement these potential measures to their individual staff members and visitors

Table 5 Potential green travel plan measures

Measure	Description of measure	Relevant transport mode	Audience	
			Staff	Visitors
Staff cycle advice	Advice on cycling and walking routes	Cycling/ Walking	✓	
Safety training	Cycle safety training courses (provided by others) for staff to improve cycling confidence.	Cycling	✓	
Staff induction	All staff members to be made aware of the travel plan as part of their induction process, including location of end of trip facilities on Site and available non-car travel options	All modes	✓	
Walking & cycling map	Produce an online map showing cycle and walking routes and bicycle parking in the area	Cycling/ Walking	$\checkmark$	✓
End of trip facilities	Provision of end of trip facilities for staff	Cycling/ Walking	✓	

Measure	Description of measure	Relevant transport	Audience	
Wedsure	Description of measure	mode	Staff	Visitors
Bicycle	On site cycle parking for staff and visitors, the use of these spaces will be monitored and requirements reviewed based on their usage.	Cycling	✓	✓
parking	Ensure bicycle parking is clearly visible or provide signage to direct people to cycle bays	Cycling	✓	✓
Real time information	Provide information on public transport journey times to the Central Station via links to existing journey planning webSites.	Public Transport	<b>√</b>	<b>✓</b>
Flexible working	Atlassian to maintain existing policy of flexible working / work from home policy for staff to reduce peak travel demand	Public Transport	<b>✓</b>	
Public transport use	Encourage public transport use for business travel	Public Transport	✓	
Car parking	No on-Site parking for staff or visitors to be provided as part of the proposal	Private vehicles	<b>✓</b>	<b>✓</b>
Car share	Promote the availability of existing car share spaces in close proximity to the precinct	Private vehicle	<b>√</b>	<b>✓</b>

# 7.5 Monitoring and review

An important part of any Travel Plan is the continual monitoring and review of its effectiveness. It is essential that a Travel Plan is not a one-off event, but evolves over time. Regular monitoring and reviewing will help to gauge progress and, if necessary, enable the Travel Plan to be refined and adapted in order to improve its progression. Atlassian will be responsible for ensuring key objectives of the strategy are kept up-to-date, focused and in line with best practice. If travel patterns or policies change significantly, then policies should be updated to reflect the current environment.

The monitoring measures could include:

- Staff travel surveys undertaken every one to two years
- Collecting data on employee travel patterns for journeys to work (through surveys or analysing journey to work or Opal data)
- Utilisation of bicycle parking facilities in the precinct.

One of the most effective ways of monitoring the success of the GTP is to undertake a travel questionnaire survey of staff and visitors. This survey would consider year on year travel trends and be used to inform the development of the GTP over time.

# 8 Summary

This transport impact assessment has been prepared to support the planning application (SSD 10405) for a commercial and hotel development above the Former Inwards Parcel Shed at 8 – 10 Lee Street, Haymarket.

The Site benefits from being located adjacent to Central railway station – Australia's busiest transport interchange. The interchange provides extensive public transport access across Sydney including local trains, buses, light rail services, country-link services, and private buses and coaches. Central Station is undergoing rapid transformation by the NSW State Government to allow for the integration of rail, metro and light rail transport infrastructure to improve connectivity in Sydney.

In this context transport strategy developed for the proposal has focused on providing access via sustainable modes of transport and minimising private vehicle access. The proposal provides for improved pedestrian connectivity through new vertical transportation from lower ground to upper ground to facilitate access to the building, as well as through site connections to Henry Deane Plaza. Bicycle parking is to be provided for staff and visitors so as to encourage this form of transport to the site. No car parking will be provided on the Site for staff or visitors – thereby minimising traffic impacts and promoting other forms of transport.

The potential impacts of the project, and associated mitigation measures, are summarised in Table 6 below.

Table 6 Potential projects impacts and associated mitigation measures

Potential impacts of proposal	Mitigation Measure
The proposal will result in increased pressure on onstreet loading zones in the vicinity of the Site.	The design proposes to provide a total of nine service vehicle bays within the loading dock. Based on surveys of similar commercial developments, this provision is sufficient to accommodate the loading and servicing demands entirely within the Site and not on surrounding streets.
The proposal will result in increased traffic congestion on the surrounding road network	No car parking is being provided as part of the development and therefore the traffic impact will be negligible, with the main traffic generation related to servicing and deliveries

Potential impacts of proposal	Mitigation Measure
The proposal will impacts pedestrians, cyclists and general traffic during construction	A preliminary Construction Pedestrian and Traffic Management Plan (CPTMP) has been prepared, describing how it is proposed to manage the impacts to traffic, pedestrians, cyclists and public transport users during the construction stage. A more detailed CPTMP will be prepared prior to the commencement of construction.
The proposal will generate additional demands on the public transport network	The Site is strategically located directly adjacent to Central Railway Station as well as a number of local and regional bus services. The advent of the future Sydney Metro City and Southwest, along with signalling and infrastructure upgrades across the existing Sydney rail network, will have the capacity to accommodate the additional demands generated on the public transport network.
The proposal will inhibit future vehicle access to adjacent buildings	The proposal allows for delivery of an integrated basement being delivered as part of the redevelopment of the Dexus/Frasers Site, including a single vehicle access point at the southern end of Lee Street.
The proposal will generate additional demand for bicycle parking facilities	The proposal will include a large bicycle parking and end of trip area to provide 336 bicycle parking spaces as well as over 400 lockers and 37 showers.