Macquarie Capital

Metro Martin Place

Stage 1 Amending DA - Transport, Traffic, Pedestrian and Parking Report

CSWSMP-MAC-SMA-TF-REP-999905

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This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 247838

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1 Introduction

1.1 Introduction

This report supports a State Significant Development (SSD) Development Application (DA) submitted to the Minister for Planning (Minister) pursuant to Part 4 of *the Environmental Planning and Assessment Act 1979* (EP&A Act) on behalf of Macquarie Corporate Holdings Pty Limited (Macquarie), who is seeking to create a world class transport and employment precinct at Martin Place, Sydney.

The SSD DA seeks approval for an amended Concept Proposal (otherwise known as a Stage 1 DA) relating to the Martin Place Metro Station Precinct ('the Precinct'). An existing development consent (SSD 17_8351) for a Concept Proposal is in place for the Precinct, which approved the concept for two Over Station Development (OSD) commercial towers above the northern (North Site) and southern (South Site) entrances of Martin Place Metro Station. The Concept Proposal approved building envelopes, land uses, Gross Floor Areas (GFA) and Design Guidelines with which the detailed design (otherwise known as a Stage 2 DA) must be consistent.

This Stage 1 Amending DA is a concept development application made under Section 4.22 of the EP&A Act. It seeks to align the approved South Site building envelope with the new planning controls established for the precinct as a result of a site specific amendment to Sydney LEP 2012. The new controls permit greater building height (over a portion of the South Site only) and additional floor space (North Site and South Site).

Whilst the approved Concept Proposal related to the entire Precinct, this Amending DA relates principally to the building envelope of the **South Site**, in terms of amending the approved height and floor space.

This application does not seek approval for elements of the Martin Place Station Precinct which relate to Stage 2 of the Sydney Metro infrastructure project, which is subject to a separate Critical State Significant Infrastructure (CSSI) approval. These include:

- Demolition of buildings on the North Site and South Site;
- Construction of rail infrastructure, including station platforms and concourses;
- Ground level public domain works; and
- Station related elements in the podium of the North Site and South Site building.

The approved Stage 1 Concept Proposal approved conceptual OSD areas in the approved Martin Place Station Structure, above and below ground level, which are classified as SSD as they relate principally to the OSD. These components are within the Metro CSSI approved station envelope that will contain some OSD

elements not approved in the CSSI consent. Those elements include the end of trip facilities, office entries, office space and retail areas, along with other office/retail plant and back of house requirements that are associated with the proposed OSD and not the rail infrastructure. This Amending DA does not propose to modify this.

Accordingly, this report sets out the transport, traffic, pedestrian and parking features of the Stage 1 SSD DA and the associated impacts. The report includes background information, the existing traffic conditions, a description of the proposal and an assessment of the traffic impact of the precinct.

1.2 Context

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

Sydney Metro is a new standalone rail network identified in Sydney's Rail Future. The Sydney Metro network consists of Sydney Metro Northwest (Stage 1) and Sydney Metro City & Southwest (Stage 2).

Stage 2 of the Metro entails the construction and operation of a new Metro rail line from Chatswood, under Sydney Harbour through Sydney's CBD to Sydenham and onto to Bankstown through the conversion of the existing line to Metro standards. The project also involves the delivery of seven (7) new Metro stations, including Martin Place.

This step-change piece of public transport infrastructure once complete will have the capacity for 30 trains an hour (one every two minutes) through the CBD in each direction catering for an extra 100,000 customers per hour across the Sydney CBD rail lines.

On 9 January 2017 the Minister approved the Stage 2 (Chatswood to Sydenham) Metro application lodged by Transport for NSW (TfNSW) as a Critical State Significant Infrastructure (CSSI) project (reference SSI 15_7400). Work is well underway under this approval, including demolition of buildings at Martin Place.

The OSD development is subject to separate applications to be lodged under the relevant provisions of the EP&A Act.

1.3 Site Description

The Sydney Metro Martin Place Station Precinct project relates to the following properties (refer to **Figure 1**):

- 50 Martin Place, 9 19 Elizabeth Street, 8 12 Castlereagh Street, 5 Elizabeth Street, 7 Elizabeth Street, and 55 Hunter Street (North Site);
- 39 49 Martin Place (South Site); and
- Martin Place (that part bound by Elizabeth Street and Castlereagh Street).



This Stage 1 Amending DA relates principally to the building envelope of the South Site, being land at 39 - 49 Martin Place, Sydney (refer to **Figure 1**).

Figure 1 – Aerial Photo of the North and South Site of the Martin Place Metro Station Precinct

1.4 Background

Sydney Metro Stage 2 Approval (SSI 15_7400)

On 9 January 2017, the Minister approved Stage 2 of the Sydney Metro project, involving the construction and operation of a metro rail line between Chatswood and Sydenham, including the construction of a tunnel under Sydney Harbour, links with the existing rail network, seven metro stations (including a station at Martin Place), and associated ancillary infrastructure. The project approves the demolition of existing buildings at Martin Place, excavation and construction of the new station (above and below ground) along with construction of below and above ground structural and other components of the future OSD, although the fit-out and use of such areas are the subject of separate development approval processes.

Modification 3 to the Sydney Metro consent, approved 22 March 2018, enabled the inclusion of Macquarie-owned land at 50 Martin Place and 9-19 Elizabeth Street within the Martin Place Station footprint, and other associated changes (including retention of existing MLC pedestrian link).

Planning Proposal (PP_2017_SYDNE_007_00) – Amendment to Sydney LEP 2012

The Planning Proposal (PP_2017_SYDNE_007_00) sought to amend the development standards applying to the Sydney Metro Martin Place Station Precinct through the inclusion of a site-specific provision in the Sydney LEP 2012. This site-specific provision reduced the portion of the South Site that was subject to a 55 metre height limit from 25 metres from the boundary to Martin Place, to 8 metres, and applies the Hyde Park North Sun Access Plane to the remainder of the South Site, forming the height limit of the tower. It also permitted a revised FSR of 22:1 on the South Site and 18.5:1 on the North Site (resulting in a combined permissible overall GFA of 153,141m²). These amendments were gazetted within Sydney LEP 2012 and reflect the new planning controls applying to the precinct.

Concept Proposal (SSD 17_8351)

On 22 March 2018, the Minister approved a Concept Proposal (SSD 17_8351) for the Precinct. The Concept Proposal established the planning and development framework through which to assess the detailed Stage 2 applications.

The approved Concept Proposal specifically encompassed:

- building envelopes for OSD towers on the North Site and South Site (see Figure 3) comprising:
 - 28+ storey building on the South Site, with a 25m setback to Martin Place above 55m in height, and a 40+ storey building on the North Site.
 - Concept approval to integrate the North Site with the existing/retained 50 Martin Place building (the former Government Savings Bank of NSW).
- predominantly commercial land uses on both sites, comprising office, business and retail premises;
- a maximum total GFA of 125,437m² across both sites;
- consolidated Design Guidelines to guide the built form and design of the future development.
- a framework for achieving design excellence.
- strategies for utilities and services provision, managing drainage and flooding, and achieving ecological sustainable development.
- conceptual OSD areas in the approved Martin Place Metro Station structure, above and below ground level¹.

¹ Refers to those components within the Metro CSSI approved station envelope that will contain some OSD elements not approved in the CSSI consent. Those elements include the end of trip

The Concept Proposal was prepared and determined prior to the site specific Sydney LEP 2012 amendment being gazetted and was developed based on the height development standards that applied to the South Site at the time. As a result, the approved Concept Proposal allows for a tower on the South Site that is now inconsistent with the building envelope envisaged through the Sydney LEP 2012.



Figure 2 – North Site and South Site Approved OSD Building Envelopes

1.5 Overview of the Proposed Development

The Stage 1 Amending DA seeks approval for an amended Concept Proposal for the Martin Place Metro Station Precinct, specifically a larger building envelope for the South Site compared to the building envelope approved by the Minister through SSD 17_8351. The amended South Tower envelope will reflect a building envelope that aligns with the new controls applying to the precinct under Sydney LEP 2012, including increased height and FSR limits. It is proposed to amend the South Tower building envelope, through:

• a tower setback to Martin Place of 8 metres above the 55m podium height (reduced from 25 metres as approved within the Concept Proposal);

facilities, office entries, office space and retail areas, along with other office/retail plant and back of house requirements that are associated with the proposed OSD and not the rail infrastructure.

- a tower height that is consistent with the Hyde Park North Sun Access Plane beyond the 8m setback to Martin Place (constituting a generally taller tower than approved within Concept Proposal); and
- an increase in GFA/FSR for the South Site from approximately 23,700m² (12.5:1) up to approximately 41,700m² (22:1) inclusive of all CSSI Station components.

Figure 3 below illustrates these proposed amendments to the South Site building envelope.

It is proposed that a condition be imposed on the Stage 1 Amending DA development consent pursuant to Section 4.17(1)(b) of the EP&A Act, requiring the modification of the original consent (SSD 17_8351) upon the commencement of the Stage 1 Amending DA Consent, in accordance with the procedures under Clause 97 of the *Environment Planning and Assessment Regulation 2000* (EP&A Regulation). This condition would address any inconsistency between the approved Concept Proposal and the Stage 1 Amending DA (and any subsequent detailed consents, i.e. the Stage 2 South Site DA).





Figure 3 – Relationship between the approved and proposed amended South Site building envelope

1.6 Planning Approvals Strategy

State Environmental Planning Policy (State and Regional Development) 2011 (SEPP SRD) identifies development which is declared to be State Significant.

Under Schedule 1 and Clause 19(2) of SEPP SRD, development within a railway corridor or associated with railway infrastructure that has a capital investment value of more than \$30 million and involves commercial premises is declared to be State Significant Development (SSD) for the purposes of the EP&A Act.

The proposed amendment (involving commercial development that is both located within a rail corridor and associated with rail infrastructure) is therefore SSD.

Submitted separately to this SSD DA are detailed proposals for the South Site (Stage 2 South Site DA) and North Site (Stage 2 North Site DA), which follow the approval of the Concept Proposal for the Precinct under Section 4.22 of the EP&A Act (formerly Section 83B). The Stage 2 detailed DA for the South Tower includes a design which is consistent with the envelope envisaged with this subject Stage 1 Amending DA and where it must only be determined following approval of the subject Stage 1 Amending DA.

Figure 4 below is a diagrammatic representation of the suite of key planning applications undertaken or proposed by Macquarie and their relationship to the subject application (the subject of this report).



Figure 4 – Relationship of key planning applications to the **Stage 1 Amending DA** (this application)

The Department of Planning and Environment have provided Secretary's Environmental Assessment Requirements (SEARs) to the applicant for the preparation of an Environmental Impact Statement for the proposed development. This report has been prepared having regard to the SEARs as follows:

SSD Issue	Report Section
 Statutory and Strategic Context The EIS shall address the statutory provisions applying to the site contained in all relevant environmental planning instruments (EPIs), including: State Environmental Planning Policy (Infrastructure) 2007; State Environmental Planning Policy (State and Regional Development) 2011; and Sydney Local Environmental Plan 2012. 	See Section 2
 The EIS shall address the relevant planning provisions, goals and strategic planning objectives in the following: A Metropolis of Three Cities NSW State and Premier Priorities Eastern City District Plan Future Transport 2056 State Infrastructure Strategy 2018 Development near Rail Corridors and Busy Roads – Interim Guideline Guide to Traffic Generating Developments Heritage Council Guideline on Heritage Curtilages 1996 Heritage Council Guideline, Design in Context – guidelines for infill development in the Historic Environment, 2005 Better Placed – an integrated design policy for the built environment of NSW 2017 Relevant City of Sydney policies, codes and guidelines (where required pursuant to relevant Local Environmental Plan) 	See Section 2
Traffic, parking and access The EIS shall include a traffic, parking, freight, servicing and access assessment identifying any additional impacts of the Amending Concept Proposal on the traffic and transport network and pedestrian and cyclist safety adjacent to the site when compared to the existing Concept Approval. Any associated impacts and/or mitigation measures are to be included in the EIS.	See Section 4 and 5
 The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the <i>EP&A Regulation 2000</i>. Provide these as part of the EIS rather than as separate documents. In addition, the EIS must include the following traffic and parking assessment 	Noted

2 **Regulatory Context**

The following is a brief description of the transport planning provisions, goals and strategic planning objectives which are relevant to the Stage 1 SSD DA Concept Proposal.

2.1 Sydney Local Environmental Plan 2012

The Sydney Local Environment Plan (LEP) 2012 applies to most of the City's local area and is made up of a written instrument and maps. It 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 additional car parking spaces are proposed to be provided as part of the proposed development.

2.2 State Environmental Planning Policy (Infrastructure) 2007

The aim of this policy document is to facilitate the effective delivery of infrastructure across NSW. Clauses relevant to the development include:

- Clause 88B: Development near proposed metro stations; and
- Clause 104: Traffic generating development

The proposed development is aligned with these clauses.

2.3 Greater Sydney Region Plan

The Greater Sydney Region Plan, *A Metropolis of Three Cities* aims to align infrastructure and growth to restructure economic activity and access across the three cities:

- The established Eastern Harbour City building on its recognised economic strength and addressing liveability and sustainability.
- The developing Central River City investing in a wide variety of infrastructure and services and improving amenity.
- The emerging Western Parkland City establishing the framework for the development and success of an emerging new city

In terms of connectivity, a key concept in the Plan is that of a 30-minute city that connects people to jobs, businesses, schools and services and supports the economic efficiency of trade gateways.

This proposal is consistent with the objectives of this Plan, improving the connectivity of the CBD and catering for additional employment needs.

2.4 Future Transport Strategy 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

- 1 Customer Focused
- 2 Successful Places
- 3 Growing the Economy
- 4 Safety and Performance
- 5 Accessible Services
- 6 Sustainability

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

2.5 Sustainable Sydney 2030

The Vision for The City of Sydney is to be a green, global and connected city, leading the world in all three of these fields. Among the ten strategic directions for Sustainable Sydney are 'integrated transport for a connected city' and 'a city for walking and cycling'. The proposed development is aligned with this vision, through its central location above a Metro and Train station as well as its provision of high quality end of trip facilities for pedestrians and cyclists.

2.6 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.

Employees of the proposed development will take advantage of these improved connections.

2.7 Sydney's Walking Future

Sydney's Walking Future (Transport for NSW, 2013) sets out a strategy to encourage people in Sydney to walk more through actions that make it a more convenient, better connected and safer mode of transport.

Key points to emerge from the strategy that are relevant to the proposed development include:

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

2.8 Sydney's Cycling Future

Sydney's Cycling Future (Transport for NSW, 2013) provides a framework for the way cycling is planned and prioritised in Sydney. It aims to grow the number of people cycling for transport by investing in safe, connected networks, making better use of existing infrastructure and fostering the formation of partnerships to develop cycling infrastructure. Key points to emerge from the strategy that are relevant to the proposed development include:

- A safe and connected bicycle network benefits the wider transport network by improving access to towns and centres, reducing congestion and increasing capacity on the public transport system.
- The promotion of safe separation of cyclists from motor vehicles and pedestrians where possible.
- Investment in bicycle infrastructure should be prioritised within 5km of public transport interchanges to provide improved connections.
- Promoting 'bike-and-ride' at major public transport interchanges including secure parking facilities integrated with public transport access.

The City of Sydney is moving towards a well-connected cycle network to improve accessibility for workers and visitors to the CBD. The development will encourage people to cycle by providing high quality end of trip facilities for employees and visitors.

2.9 Sydney's Light Rail Future

Sydney's Cycling Future (Transport for NSW, 2013) provides a framework for the way light rail is planned and prioritised in Sydney. The plan identifies four stages for the future of light rail, including the provision of the CBD and South East Light Rail.

This line will be an attractive option to employees and visitors of the development, with Wynyard being the nearest stop.

2.10 Relevant Policies and Guidelines

The following documents have been considered in the development of this report:

- Sydney Streets Design Code and Sydney Streets Technical Specification used to inform any modifications to the street network.
- Roads and Maritime Services (RMS) Guide to Traffic Generating Developments used to inform the traffic assessment undertaken for the project.
- EIS Guidelines Road and Related Facilities used to inform the preparation of the transport strategy, in particular the assessment of transport impacts.
- NSW Planning Guidelines for Walking and Cycling and NSW Bicycle Guidelines. These documents have been used to inform the development of the walking and cycling measures proposed in this strategy.
- 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 Transport Conditions

The purpose of this section of the report is provide the transport context in which the development exists, describing the existing travel patterns of employees in the vicinity of the development site, the accessibility of the development site by various travel modes, the availability of on-street and off-street parking and the kerbside lane controls in place surrounding the South Site.

The South Site site is located in the Sydney CBD and is surrounded by Martin Place to the north and retail/commercial developments to the south, east and west as shown in Figure 1. To the west is the MLC Centre (retail and commercial) with 50-58 Elizabeth Street and 60 Elizabeth Street to the east (both commercial buildings and with ground floor retail). To the south is 55 Elizabeth Street (the University of Newcastle's Sydney campus) and 60 Castlereagh Street (the BNP Paribas Centre).



Figure 1 Site location and surrounding development

3.1 Existing travel patterns / mode share

Census Journey to Work (2016) data has been used to analyse the existing commuter travel behaviour in the area and characterise the public transport conditions in the vicinity of the proposed development site.

The 'Destination Zone' (DZN³) to which these statistics apply is the block bounded by Martin Place, Elizabeth Street, Castlereagh Street and King Street, allowing for high quality data in relation to travel patterns (see Figure 2). The South Site is located in the northern end of this DZN.

At the time of the Census (and prior to any demolition works), this zone had an employment population of approximately 2,500 people of which it is estimated that 1,000 people were working in the existing South Site buildings. Their main mode of travel is summarised in Figure 3. Over half of all commuters working in the area travel by train (53%) and a further 26% travel by bus. Travel by private car accounts for 13% of all trips (11% as car driver and 2% as car passenger). This indicates that the vast majority of employees in the area are using public transport for their commute. Walking trips account for 5% of the commuting trips with 1% of trips made by bicycle.



Figure 2 DZN utilised for analysis

³ DZN 113371071 utilised for the analysis



Figure 3 Mode Share

The largest proportion of employees commute from North Sydney (17%) followed by Sydney Eastern Suburbs (14%), and Inner City (13%).

3.2 Existing vehicular access and kerbside uses

The South Site has two trafficable street frontages. A brief description of these streets in the vicinity of the South Site is described below:

1) Castlereagh Street – (between Hunter Street and King Street)

- Castlereagh Street is a one-way street southbound and consists of one bus lane and one traffic lane. On the both sides of the road, there are parking lanes which are mainly designated as loading bays or bus zones on weekdays, with on-street parking permitted at weekends.
- Castlereagh Street forms a signalised intersection with Hunter Street (to the North) and King Street (to the South) with pedestrian crossings on all arms of the intersections while there is also a wide pedestrian crossing at the intersection with Martin Place.
- There is one existing vehicular access points to the South Site from Castlereagh Street as shown in Figure 4 (prior to any demolition works).
- 2) Elizabeth Street (between Hunter Street and King Street)
- Elizabeth Street is a two-way street and generally consists of one bus lane and one traffic lane in each direction. Northbound, north of Martin Place, there are three traffic lanes and no bus lanes.
- On both sides of the road, the kerbside lanes are mainly designated as loading bays or bus zones on weekdays, with on-street parking permitted at weekends. Northbound for 50m on approach to the intersection with Hunter Street, the kerbside lane is a left-turn traffic lane during the day (i.e. 'no stopping').

• Elizabeth Street forms a signalised intersection with Hunter Street (to the North) and King Street (to the South) with pedestrian crossings on all arms of the intersections while there is also a wide pedestrian crossing at the intersection with Martin Place. There are no existing vehicle access points to the South Site from Elizabeth Street.



Figure 4 South Site existing vehicle access points

The on-street kerbside parking controls along Castlereagh Street and Elizabeth Street in the vicinity of Martin Place Station are heavily focused on bus and loading zones. On-street vehicle parking in the vicinity of the precinct is heavily restricted and is generally only permitted overnight and on weekends. The weekday, daytime kerbside uses of the streets surrounding the South Site are shown in Figure 5.



Figure 5 Weekday daytime kerbside uses

3.3 Traffic volumes

The existing traffic volumes on the surrounding road network in the vicinity of the precinct have been extracted from the Sydney Metro (Chatswood to Sydenham) EIS and are presented in . The following commentary was made in the EIS in relation to traffic in the local area.

"Elizabeth Street northbound experiences heavy traffic volumes during both peak periods. There is a strong movement from Macquarie Street (southbound) in the

east to Castlereagh Street (southbound) via Hunter Street, which contributes to relatively heavy westbound traffic on Hunter Street.

Currently, the Macquarie Street / Bent Street / Eastern Distributor ramps intersection is extremely congested during the AM and PM peaks with the intersection performing above its theoretical capacity at level of service F. Long delays are caused by conflict between high volumes of traffic on the Eastern Distributor ramps (westbound) and Macquarie Street (southbound).

All other intersections near the Martin Place Station construction sites currently operate at level of service B or better. However, at the Elizabeth Street / Phillip Street / Hunter Street intersection, signal coordination along Elizabeth Street causes delays for conflicting right turn movements and vehicles on side-streets.⁴"

Road	Direction	AM peak hour (vehicles per hour)	PM peak hour (vehicles per hour)
Castlereagh St (between King St and Hunter St)	Southbound	380	510
Elizabeth Street	Southbound	1,130	1,110
(between King St and Hunter St)	Northbound	410	590
Hunter Street	Eastbound	190	190
(between Castlereagh St and Elizabeth St)	Westbound	790	630

Table 1 Martin Place Station existing traffic volumes

(Source: Sydney Metro (Chatswood to Sydenham) EIS, Chapter 8)

3.4 On-site Parking

The South Site has a single existing underground car park which is accessible off Castlereagh Street:

• 39-49 Martin Place (68 spaces) – (to be removed during the Metro demolition works).

These spaces will be removed as part of the development of the South Site

3.5 Public transport access

The area is highly accessible by public transport as reflected by the high usage of trains, buses and ferries as a travel mode to work (approx. 75%). The South Site has some of the highest public transport accessibility in Sydney, with the location of the main rail and ferry transport nodes within 800m walking catchment of the South Site as shown in Figure 6. The future 'Wynyard' light rail stop on George

⁴ Sydney Metro (Chatswood to Sydenham) EIS, Chapter 8



Street will also be within walking distance. A summary of the existing and planned future public transport options are summarised below.

Figure 6 Main public transport nodes surrounding the precinct

3.5.1 Trains & Metro

Martin Place Station has a direct pedestrian access to Martin Place, with the station having seven operational pedestrian access points at present. Train services operating at this station include the T4 Eastern Suburbs and Illawarra Lines, offering high frequency services between Bondi Junction and areas in southern Sydney, including Hurstville, Sutherland, Cronulla, Waterfall and Wollongong.

These trains stop at Town Hall (next stop west of Martin Place) which offers direct interchange to most destinations on the Sydney Trains network. At peak times trains are operating at 3-4 minute frequencies in both directions increasing to 10 minute frequencies in the evening time.

St James Station's entrance on the north side of St James Road is approximately 200m from Martin Place. This station is on the City Circle line offering services to the T3 Airport and East Hills Line, as well as to the Inner West via Circular Quay, Wynyard and Town Hall.

Wynyard Station's George Street entrance is approximately 500m from Martin Place. There are a number of rail services operating from this station including the T1 North Shore & Northern line and the T8 Airport & South Line

The Sydney Metro City and Southwest line, when operational, will have a station at Martin Place with trains every four (4) minutes at peak times operating between Epping and Sydenham and in the future to Bankstown.

3.5.2 Buses

The CBD is supported by extensive bus networks, which cover most of the area within approximately 10km of the CBD, as well as some longer distance services from the Northern Beaches, Upper North Shore and the Northwest. This network comprises primarily direct services which serve particular suburbs at their outer extent and then converge on corridors as they approach the CBD. 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.

Sydney Buses

A number of buses stop on Castlereagh and Elizabeth Street in the vicinity of the site (see Figure 7). Services originate from

- Inner West including Ashfield, Burwood, Lilyfield, Abbottsford and Chiswick via Broadway and George Street;
- North West via Victoria Road corridor including areas such as Ryde and Eastwood; and
- South West (Tempe, Kingsgrove, Canterbury, Dulwich Hill).

When leaving the City most services use Castlereagh Street. Services from the Eastern Suburbs generally run along Elizabeth Street.

Another major transport interchange is Wynyard, which has services from the Northern Beaches (B-Line) and Lower North Shore, and the Victoria Road Corridor. The B-line is a 'turn up and go' service while other bus services vary in frequency throughout the day.

Private Bus Operators

In addition to the above Sydney Buses services, a number of private operators offer services to the City. These include services from:

- Sydney's North West (Hillsbus) which generally use the M2 Motorway alignment and Gore Hill Freeway, connecting at Wynyard and then Town Hall and Railway Square; and
- Sydney's Upper North Shore (Forest Coach Lines and Shorelink) connecting Belrose, North Turramurra, East Wahroonga and Terry Hills stopping at Wynyard and Town Hall.

Convenient bus stops are in the Wynyard area and some inbound services stop at York Street, which is marginally closer to the precinct.



Figure 7 Bus routes and stops in the vicinity of the South Site

3.5.3 Ferry

Circular Quay Ferry Wharves are approximately 800m from Martin Place walking via Bligh Street and Young Street. From Circular Quay, there are regular ferry connections to Manly, Taronga Zoo, Parramatta, Darling Harbour, Neutral Bay, Mosman Bay and Eastern Suburbs. The Sydney Ferry Network is presented in .



Figure 8 Sydney Ferry Network

3.5.4 Light rail

The CBD and South East Light Rail is a 12km light rail network currently under construction. When completed, it will operate between Circular Quay and Kingsford/Randwick with 19 stops (including Central Station). The nearest stop to the precinct will be the Wynyard stop on Georges Street, approximately a 5-minute walk.

Construction is expected to be completed with services operational in 2020.

3.6 Pedestrian access

The main pedestrian access points to the existing South Site building is presented in . Much of the ground floor space on Castlereagh Street and Elizabeth Street is occupied by retail units, each with individual entrances from street level for pedestrians.

Building Address	Primary access points	Status
39-49 Martin Place	Castlereagh Street, Martin Place and Elizabeth Street	Demolished/to be demolished as part of Metro

Table 2 Pedestrian Access Points

3.7 Pedestrian volumes

As part of the Sydney Metro (Chatswood to Sydenham) EIS, pedestrian surveys were undertaken in December 2015 at the Martin Place / Castlereagh Street and Martin Place / Elizabeth Street pedestrian crossings.

The surveys showed:

- Around 44,300 pedestrians crossed at Castlereagh Street throughout the day, with around 20,950 travelling eastbound and 23,350 travelling westbound. In the AM period, the dominant pedestrian movement was westbound towards commercial buildings and George Street, whilst in the PM period the dominant movement was eastbound towards the Sydney Trains Martin Place Station.
- Around 33,900 pedestrians crossed at Elizabeth Street throughout the day, with around 13,700 travelling eastbound and 17,200 travelling westbound. As with Castlereagh Street, most pedestrians travel westbound in the AM period and eastbound in the PM period.⁶

It is noted that these counts were undertaken prior to the recent demolition of buildings in this precinct as part of Metro works.

⁶ Extract from Sydney Metro, Chatswood to Sydenham EIS, Chapter 8

3.8 Cycling Network

There are a number of key cross-city cycle routes in the CBD which form part of City of Sydney Council's cycling network. These routes are as follows:

- Kent Street (separated, bi-directional cycleway)
- King Street (separated, bi-directional cycleway)
- Pyrmont Bridge (shared cycle path)
- Macquarie Street (mixed street environment)
- Alfred Street north (shared cycle path)
- College Street (separated, bi-directional cycleway)

The Sydney City Centre Access Strategy was released by the NSW Government in December 2013. The strategy outlines the future city centre cycleway network to encourage growth in cycling and reduce pressure on the public transport system. The future city centre cycle network is shown in , and includes:

- Extending the Kent Street cycleway south to Liverpool Street
- Construction of a bi-directional cycleway on Liverpool Street
- Construction of a bi-directional cycleway on Castlereagh Street and Pitt Street, providing a new north-south connection through the CBD – (noted that the construction of Castlereagh Street north cycle has been deferred by Roads and Maritime Services)
- Extending the existing King Street cycleway to Castlereagh Street
- Extending the east-west cycleway along Park Street to Castlereagh Street

There is a small amount of on-street bicycle parking (c.15 stands) located along the streets surrounding the precinct. Most of the stands are attached to street furniture (see) with three dedicated stands located at the corner of Castlereagh Street and Martin Place.







Figure 9 Strategic Cycleway Network Map (Source: Sydney City Centre Access Strategy)

Figure 10 Local cycle parking facilities

4

4 Development Proposal

4.1 Description

The Stage 1 Amending DA seeks approval for an amended Concept Proposal for the Martin Place Metro Station Precinct, specifically a larger building envelope for the South Site compared to the building envelope approved by the Minister through SSD 17_8351.

It is proposed to amend the South Tower building envelope, through:

- a tower setback to Martin Place of 8 metres above the 55m podium height (reduced from 25 metres as approved within the Concept Proposal);
- a tower height that is consistent with the Hyde Park North Sun Access Plane beyond the 8m setback to Martin Place (constituting a generally taller tower than approved within Concept Proposal); and
- an increase in GFA/FSR for the South Site from approximately 23,700m² (12.5:1) up to approximately 41,700m² (22:1) inclusive of all CSSI Station components.

Based on a $1/10m^2$ NLA employee density (and a 0.87 conversation rate from GFA to NLA), the commercial tower population would increase from 2,060 to 3,630. The employment population of the South Site was estimated to be 1,000, prior to the demolition of buildings as part of the Metro works.

4.2 Mode Share

A future mode share for the South Site has been estimated based on existing and predicted travel patterns to the development site and is presented in Figure 11.

The removal of the majority of on-site car parking is anticipated to reduce the car driver mode share to just 3% with a subsequent increases in the public transport and active travel mode shares as a result (it has been assumed a very small number of employees will continue to drive, parking in neighbouring parking lots or rented spaces, arriving by taxi etc).

Given the South Site will be accessible directly from Martin Place station, more than half of employment trips to the development site will be by Train/Metro (54%, a slight increase from existing), with travel by bus having the second highest mode share (25%).

Walking and cycling are anticipated to have a mode share of 6% and 5% respectively, with the quality of end of trip facilities encouraging travel by these active modes.

The nearest light rail stop to the development site will be the Wynyard stop on George Street, just a 5 minute walk to Martin Place and will be attractive mode of travel option, in particular for those commuting from the eastern suburbs.



Figure 11 South Site OSD Target Mode Split

4.3 Future daily and peak hour movements

The daily person trip profile for a typical office development in the CBD is presented in Figure 12. It is based on survey data obtained for two office developments in Sydney CBD (on Kent Street and Alfred Street). The profile is based as percentage of the busiest movement in a one hour period.

The busiest movement occurs during the AM Peak hour (8am-9am), with people entering the development. The PM peak hour 'exit' movement is approximately 80% of that which occurs in the AM peak hour 'entry' movement.

The mid-day peak of 12:30-13:30 typically consists of local pedestrian trips (e.g. to shops, cafes etc.). In terms of volumes, it is approximately 65% of the AM peak hour 'entry' movement and occurs in both directions. While these trips are generally people leaving and returning during their lunch break, the AM and PM peak hour person trips are closely associated with commuting and the use of public transport. The AM peak hour has therefore considered to be most critical and been used to assess the impact to the transport network as a result of the South Site.



Figure 12 Person trips (as a percentage of the peak hourly movement)

The South Site OSD is anticipated to generate the number of employment arrival trips shown in Table 3 based on a typical working day (i.e. assumed 85% office occupancy). These trips would take place over a three hour morning peak period, with approximately 50% of trips taking place during the morning peak hour (8am-9am).

Mode	Existing Mode Share	Existing peak hour trips (1,000 staff)	Future Mode Share	Future peak hour trips (3,630 staff)	Increase in peak hour trips
Train/Metro	53%	225	53%	818	592
Bus	25%	106	25%	386	279
Vehicle Driver	11%	47	3%	46	0
Walk	5%	21	6%	93	71
Vehicle Passenger	2%	9	1%	15	7
Tram/Ferry	3%	13	5%	77	64
Cycle	1%	4	5%	77	73
Other	0%	0	2%	31	31
Total	100%	425	100%	1,543	1,118

 Table 3 South Site generated trips

As shown in Table 3, the increase in the AM peak hour person trips generated by the OSD (in comparison to the 'existing scenario', i.e. before buildings were demolished for Metro) will be accommodated using sustainable modes with a negligible change in the total number of trips by private car.

4.4

4.4 Vehicular Site Access and Loading Dock

Vehicular access to the South Site will be limited to service vehicles accessing a loading dock turntable. No new on-site car parking spaces is proposed, with 68 parking spaces removed as part of the Metro demolition works.

The indicative loading dock access point for the South Site OSD is presented in Figure 13 (on Castlereagh Street). Further detail regarding proposals for the South site will be submitted in future applications



Figure 13 Access points to South Site OSD Loading Dock

Given the constrained nature of the South Sites due to the Metro Station provisions, it is not possible to provide the full loading dock requirement as set out in the Sydney City DCP 2012. A more sustainable outcome for the provision of service vehicles and refuse collection will be achieved by managing the dock activities throughout the day.

A Loading Dock Management Plan will be prepared as part of future applications for the site, outlining the internal layout, capacity and day to day operations of the loading dock and plans for off-site consolidation.

4.5 Car & Motorcycle Parking

No new car parking or motorcycle parking is proposed as part of the proposals for the precinct and most of the existing car parking will be removed.

4.6 Bicycle Access and Parking

End of trip facilities and bicycle parking will be provided for employees and visitors of the new development in accordance with the Sydney City DCP 2012 and Green Star requirements.

Bicycle parking is required to be Class 2 secure bicycle spaces for the employees of the building and Class 3 bicycle racks for visitor spaces (which are easily accessible and clearly signposted). The allocation and location of bicycle parking and access arrangements will be addressed in future applications.

5 Transport Assessment

5.1 Traffic generation and road network impact

As no new car parking spaces are proposed to be provided as part of the Stage 1 Amending DA (with surplus car parking spaces removed), traffic generation will be related to servicing, deliveries etc.

The dock is unlikely to have capacity for number of deliveries anticipated and therefore off-site consolidation will likely be required. A Loading Dock Management Plan will be prepared as part of future applications providing details of how this will be managed.

5.2 **Public Transport**

The Sydney Metro and the Eastern Suburbs railway at Martin Place will provide a very high level of accessibility by train. Bus stops and taxi ranks in Castlereagh Street and Elizabeth Street will provide good opportunities for other modes of access. The location also takes advantage of being 350m from George Street for LRT access and 700m from Circular Quay for ferry access. The station and supporting intermodal facilities will create a highly accessible public transport precinct.

As outlined in Section 4.3, the South Site will generate approximately 590 additional Train/Metro trips, 280 additional bus trips and 65 additional Tram/Ferry trips during the morning peak hour (when compared to the office developments that were in place prior to the demolition works for Metro).

The Sydney Metro, 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 Train/Metro capacity is considered acceptable.

Similarly, the existing extensive bus network and the proposals set out in Sydney's Bus Future to increase services, capacity and journey times across the network, the impact on bus capacities are considered to be acceptable.

5.3 Walking

The footpath network provides a range of routes for access to Martin Place which acts as an important spine for pedestrian movement in this part of the CBD. As outlined in Table 3, the South Site OSD is expected to generate an approximately 1,100 additional trips during the AM peak hour (when compared to the office developments that were in place prior to the demolition works for Metro).

Of these additional trips, approximately 590 would be by train/metro and 75 by bike, and therefore not likely to impact the surrounding footpaths.

It is therefore expected that there will be approximately 435 additional trips by foot on the surrounding footpaths (including those walking from buses etc.) that are generated by the South Site OSD.

5.4 Cycling

The site is well located to take advantage of the City's existing and planned network of high quality cycleway facilities. The proposed bi-directional cycleway on Pitt Street will form the main north-south spine through the CBD for cyclists into the area. The Macquarie proposal will provide bicycle parking for commercial employees, in line with City of Sydney/Green Star requirements.

The exact allocation and location of bicycle parking for the South Site will be addressed as part of the future Stage 2 DA's.

5.5 Emergency Vehicle Access

In the case of emergency, ambulances and fire tenders will be able to use the kerbside lanes along both Castlereagh Street and Elizabeth Street which are designated as bus lane/loading bays depending on the time of the day.

6 Green Travel Plan

A 'Green Travel Plan' will be prepared for the South Site will detail specific measures to encourage workers to use more sustainable modes to and from the development.

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.

A framework Green Travel Plan will be submitted as part of the future Stage 2 DA for the site.

7 Construction Pedestrian and Traffic Management

A framework Construction Pedestrian Traffic Management Plan will be prepared for the South Site as part of the future Stage 2 DA. The framework CPTMP will be consistent with the Construction Traffic Management Framework prepared as part of the Sydney Metro City and Southwest and include the following:

- Loading and unloading, including the locations of all proposed work zones
- Haulage routes
- Construction vehicle access arrangements
- Proposed construction hours
- Estimated number and type of construction vehicle movements, including morning and afternoon peak and off peak movements, distinguishing concrete pours from other construction activity, and noting that construction vehicles would be restricted from using work zones on Castlereagh Street and Elizabeth Street during certain times of the day
- Construction program, highlighting details of peak construction activities and proposed construction staging
- Details of specific measures to ensure the arrival of construction vehicles to the site does not cause additional queuing on Elizabeth Street, Hunter Street, Castlereagh Street and King Street
- Details of any construction vehicle marshalling areas
- The staging of works and simultaneous construction with other projects in the area, including the Sydney Light Rail Project, Sydney Metro and other developments nearby, and identify mitigation measures to ensure the proposal can be constructed while the impacts to rail users (and their connections) are appropriately managed
- Any potential impacts to general traffic, cyclists, pedestrians and bus services within the vicinity of the site from construction vehicles during the construction of the proposed works
- Measures proposed to mitigate any associated impacts of traffic, public transport, pedestrians and cyclists should be clearly identified and included in the draft CPTMP.

The Sydney Coordination Office will be consulted with in the development of this plan. The final CPTMP plan will be developed by the appointed Contractor for the project.

8 Conclusions

This report examines the transport, traffic, pedestrian and parking implications of the Stage 1 Amending DA. The precinct is very accessible by non-car modes as evidenced by the existing JTW travel patterns.

It is anticipated that the proposal will have a negligible traffic impact on the road network, with a number of existing parking spaces to be removed. The additional pedestrian trips generated as a result of this proposal will also have an acceptable impact on the surrounding footpaths and crossings considering the various route choices and entrances available.

Further detail regarding proposals for the site, loading dock management and construction traffic management will be submitted in future applications.