SAMSA CONSULTING TRANSPORT PLANNING & TRAFFIC ENGINEERING

7 June 2022

Sydney Metro L40, 680 George Street SYDNEY, NSW 2000

Our Ref: Pitt St_IAP review

Attention: Garry Hitchcox / Ahsanul Amin

Dear Garry / Ahsanul,

PITT STREET STATION Review of Interchange Access Plan

BACKGROUND

The Sydney Metro project will deliver over 60 km of metro rail between Tallawong and Bankstown via the Sydney CBD. Sydney Metro City & Southwest includes the construction and operation of a new metro rail line from Chatswood, under Sydney Harbour through Sydney's CBD to Sydenham and on to Bankstown.

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

Pitt Street Station is a new underground station strategically located at the junction of Sydney's southern CBD and the midtown retail precinct.

Once operational, Pitt Street Station will service the retail areas on George and Pitt Streets, the civic and entertainment uses on George Street and the emerging southern Sydney CBD residential developments between Park Street and Belmore Park. The station will also provide relief to nearby Town Hall Station, and encourage modal interchange between both active and sustainable transport modes.

Pitt Street Station will be located below Pitt Street and Castlereagh Street, south of the Park Street intersection and north of the Bathurst Street intersection. Entry to Pitt Street Station will be via the following two new pedestrian plazas:

- Pitt Street North will be accessed from the northern footpath of Park Street between Pitt and Castlereagh Streets.
- Pitt Street South will be accessed from the southern footpath of Bathurst Street between Pitt and Castlereagh Streets.

At an interchange level, Pitt Street Station interchange will overlap with nearby interchanges supporting Town Hall, Museum and St James stations.

The following principles will apply to the integration of the over station development and the metro station:

- All access points (entries, driveways, etc.) to the over-station development will be managed and designed to not conflict with station access and interchange facilities.
- The design should allow for shared loading dock and maintenance bays with the station and over-station development.

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The main features and components of the Pitt Street station proposal include the following:

- New bike parking on Park and Bathurst Streets.
- DDA-compliant station entries to maximise accessibility for all customers.
- Footpath widening in Bathurst Street, immediately outside the Pitt Street Station south entry, to accommodate future pedestrian demand.
- Integrate with existing bus stops on Park and Castlereagh Streets to support seamless modal interchange.

There is no design provision considered for rail, light rail, ferry, coach, 'kiss'n'ride' and 'park'n'ride' modes at Pitt Street, although it is noted that 'kiss'n'ride' can occur within existing 'No Parking' zones near the station entries.

REVIEW CONTEXT & SCOPE

The Interchange Access Plan has been prepared to:

- Respond to the requirements of the Sydney Metro City & Southwest Chatswood to Sydenham conditions of approval.
- Provide detailed interchange deliverables.
- Inform the interchange design of transport and access facilities, including footpaths, cycle
 paths and bike parking, bus stops (temporary transport requirements considered), and car
 parking.
- Identify customer amenities, shelter, and road and traffic management required to ensure easy, accessible, safe and efficient customer transfer when services start in 2024.
- Provide a list of actions for delivery partners and other stakeholders to enable the implementation of an easy customer transfer, which supports the project objectives.

The Interchange Access Plan is provided to inform planning and investment decisions and will be updated in response to station design as required.

The Interchange Access Plans (IAPs) to be prepared under the conditions of approval include the following general requirements for Metro Stations to be addressed.

Condition E92

The Proponent must develop an Interchange Access Plan for each station to inform the final design of transport and access facilities and services, including footpaths, cycleways, passenger facilities, parking, traffic and road changes, and integration of public domain and transport initiatives around and at each station. The Interchange Access Plan(s) must consider walking and cycling catchments and take into account:

- (a) Station access hierarchy consistent with the transport planning principles defined within the EIS.
- (b) Safe, convenient, efficient and sufficient access to stations and transfer between transport modes (including subterranean connections and the safeguarding of additional entrances in response to land use change and patronage demand).
- (c) Maintenance or improvement of pedestrian and cyclists' level of service within a justified proximity to stations.
- (d) Current transport initiatives and plans.
- (e) Opportunities and constraints presented by existing and proposed transport and access infrastructure and services.

- (f) Patronage changes resulting from land use, population, employment, transport infrastructure and service changes.
- (g) Integration with existing and proposed transport infrastructure and services.
- (h) Pedestrian, cycle, bus, taxi, vehicle and emergency vehicle access and parking infrastructure and service changes.
- (i) Legislative requirements and applicable guidelines.
- (j) Safety audits, including but not limited to a review of traffic facility and cycle changes to ensure compliance with Austroads design criteria.
- (k) Final design, infrastructure, management and service measures, and the level of access and service to be achieved for all users.
- (I) Contents of the Interchange Operations and Maintenance plan (IOMP) and operational management provisions for future operational requirements, including maintenance, security and management responsibilities.

The Interchange Access Plan(s) must be prepared in consultation with the Traffic and Transport Liaison Group (TTLG) and the Design Review Panel and must be supported by traffic and transport analysis. Where necessary, consultation must also be undertaken with major landholders adjoining station precincts. The Plan(s) must detail a delivery and implementation program, which must be provided to and agreed by the Secretary before commencement of permanent above-ground facilities at any station site.

Condition E93

In developing the Interchange Access Plan(s), the Proponent must consider:

- (a) Traffic and accessibility design requirements.
- (b) Station Design and Precinct Plan(s) required by Condition E101.

As part of the Conditions, "Interchange Access Plans are required to be reviewed by a qualified traffic and transport professional, independent of the detailed design process for the CSSI, and having regard to the requirements of the approval" (Condition E96). This review is intended to satisfy Condition E96. Separate IAPs to be reviewed include those for Metro stations at Central, Crows Nest, Martin Place, Barangaroo, Victoria Cross, Nelson Street Bridge removal and Sydenham.

DOCUMENTS REVIEWED

The Interchange Access Plan (IAP) under review for Pitt Street Station is as follows:

• Sydney Metro "Interchange Access Plan – Pitt Street Station (Version 14.16: Draft)", June 2022

CONSULTATION

Consultation has been undertaken (and in some cases is ongoing) by the proponent with TfNSW Greater Sydney Division (formerly RMS), City of Sydney, Emergency Services including Fire and Rescue NSW, EuroTowers Body Corporate, Customer Journey Planning and others including and/or as part of the Traffic and Transport Liaison Group (TTLG), Traffic Coordination Group and Design Review Panel (DRP).

INDEPENDENT REVIEW

This independent review of Pitt Street Station has been prepared against the Sydney Metro City and Southwest Chatswood to Sydenham CSSI conditions of approval E92, E93 and E96. This review is a traffic and transport focused review of the study requirements.

Samsa Consulting uses an independent review rating system as shown in *Table 1* following. Where possible, suggestions are made as to how 'no evidence found' or 'insufficient' ratings may be rectified.

Rating	Explanation
No evidence found	The reviewer could not find any evidence that the study attempted to address this requirement
Insufficient	There was insufficient evidence, faulty logic, methodological flaws or other issues that the reviewer regarded as insufficient to satisfy the requirement without further evidence.
Satisfactory	The requirement was addressed and is considered to follow acceptable industry practices

Table 1: Peer Review Rating System

For ease of reading, the reviewer has also identified the significance of any 'no evidence found' or 'insufficient' evidence ratings to the outcomes of the planning and delivery of the project, its staging and in achieving integrated land use and transport outcomes – refer to *Table 2* following. It is noted that these ratings are based on professional judgement.

Significance	Explanation
Low	This non-conformance is unlikely to impact on the outcomes for the project and surrounding transport network or place. In some cases this may be as a result of the evidence or requirement based on strategies now superseded or that the requirement could be satisfied and addressed in subsequent planning stages or by others planning projects in the area.
Medium	This non-conformance is likely to diminish the quality of the transport network, place making and precinct outcomes in a way that would be challenging to rectify in subsequent stages of planning, project delivery or by other planning projects in the area.
High	This non-conformance is very challenging to address by other projects or in subsequent planning or delivery phases of the project or through the planning of the surrounding precinct. Its removal or lack of evidence is recognised to have serious consequences on place making, precinct development and transport network outcomes as a direct consequence and is recognised as a responsibility of this project. The reviewer has concerns about safety of customers, its ability to accommodate forecast growth, support and promote public transport or network reliability outcomes.

Table 2: Significance of Requirements Rated as 'Insufficient'

The findings of the independent review are detailed in *Table 3* following.

Table 3: Independent Review Findings

					For completion t	For completion by Sydney Metro		
ID	Requirement / Condition	Rating	Reason for Rating	Significance	Response / Comments	Action	Status	Category
E92	The Proponent must develop an Interchange Access Plan for each station to inform the final design of transport and access facilities and services, including footpaths, cycleways, passenger facilities, parking, traffic and road changes, and integration of public domain and transport initiatives around and at each station. The Interchange Access Plan(s) must consider walking and cycling catchments and take into account the following.	Satisfactory	Stand-alone IAP prepared addressing the access and transport issues.	Not applicable				
(a)	Station access hierarchy consistent with the transport planning principles defined in the EIS.	Satisfactory	A modal hierarchy consistent with the principles defined in the EIS was adopted in the development of the IAP. This prioritises transfers from more equitable and sustainable modes, such as walking and cycling, over vehicle-based modes, including the provision of supporting infrastructure. No cars are to access this station.	Not applicable				
(b)	Safe, convenient, efficient and sufficient access to stations and transfer between transport modes (including subterranean connections and the safeguarding of additional entrances in response to land use change and patronage demand).		Access / transfer was considered for each travel mode (Metro, bus, taxi, walking, cycling) in the development of the IAP via such measures / tasks as pedestrian modelling, bus stop capacity assessment, urban design, road safety audits and Pitt Street Station	Not applicable				

				For completion by Sydney Metro				
ID	Requirement / Condition	Rating	Reason for Rating	Significance	Response / Comments	Action	Status	Category
			Design and Precinct Plan (SDPP). Safeguarding for future demand was considered and included in the action plan, eg. eg. to The Galleries, Foodbase on Park foodcourt, Museum Station and Future Sydney Square.					
(c)	The maintenance or improvement of pedestrian and cyclist's level of service within a justified proximity to stations.	Satisfactory	The level of service for pedestrians and cyclists was considered and used to inform the design of pedestrian thoroughfares and crossings, planned cycleways and other infrastructure, especially for the two pedestrian accesses, Metro plaza, footpath widening along Park and Bathurst Streets, signalised crossing works across the Pitt Street (north and south) approaches and the safeguarding of future underground connections, eg. to The Galleries, Foodbase on Park foodcourt, Museum Station and Future Sydney Square. With respect to bicycle use, the provision of bicycle parking within the station and the connection to City of Sydney cycleway improvements, specifically along Castlereagh Street, are proposed.	Not applicable				

					For completion by Sydney Metro			
ID	Requirement / Condition	Rating	Reason for Rating	Significance	Response / Comments	Action	Status	Category
(d)	Current transport initiatives and plans.	Satisfactory	The IAP has generally considered current transport initiatives and plans (including Eastern City District Plan, Sydney City Centre Access Strategy and Future Transport 2056), City of Sydney plans / guidelines and general transport design guidelines.	Not applicable				
(e)	Opportunities and constraints presented by existing and proposed transport and access infrastructure and services.	Satisfactory	The IAP has considered and detailed key opportunities and constraints affecting the design including opportunities such as the activation of the mid-town retail precinct, relieve capacity constraints at nearby Town Hall Station, reinforce Park Street as a key east-west public transport corridor, increase the 'place' function of the area, as well as constraints related to pedestrian and vehicular traffic flows during peak periods.	Not applicable				

					For completion by Sydney Metro			
ID	Requirement / Condition	Rating	Reason for Rating	Significance	Response / Comments	Action	Status	Category
(f)	Patronage changes resulting from land use, population, employment, transport infrastructure and service changes.	Satisfactory	Forecast patronage is presented in local context and accounts for future land use, population and employment. Potential future service changes have informed the design process and the provision of interchange facilities, eg. pedestrian crossing and footpath widening as well as integration of cycling links.	Not applicable				
(g)	Integration with existing and proposed transport infrastructure and services.	Satisfactory	The IAP has generally considered the overall Pitt Street Station precinct and the Metro station has been designed to integrate with existing and proposed transport infrastructure and services for all travel modes including the cycleway network through the CBD, adjacent and surrounding footpath network and the bus / rail connections nearby. This also includes integration with the future OSD.					
(h)	Pedestrian, cycle, bus, taxi, vehicle and emergency vehicle access and parking infrastructure and service changes.	Satisfactory	Access for all modes has generally been accounted for and has considered potential service changes. This includes interchange / transfer requirements for pedestrians, cyclists and bus / train users, taxi operations, emergency	Not applicable				

					For completion by Sydney Metro				
ID	Requirement / Condition	Rating	Reason for Rating	Significance	Response / Comments	Action	Status	Category	
			vehicle and service vehicle / loading access, etc.						
(i)	Legislative requirements and applicable guidelines.	Satisfactory	All applicable legislation, standards and guidelines were used in the development of the design and IAP. Relevant guidelines (Australian Standards, Austroads guidelines and TfNSW guidelines / directives / requirements) for parking, pedestrian and bicycle facilities have been considered in the planning / design of facilities.	Not applicable					
(j)	Safety audits, including but not limited to a review of traffic facility and cycle changes to ensure compliance with Austroads design criteria.	Satisfactory	It is understood that a road safety audit is currently being undertaken for the Stage 1 design and is being used to inform further development of the IAP.	Not applicable					
(k)	Final design, infrastructure, management and service measures and the level of access and service to be achieved for all users.	Satisfactory	Design principles and access and service objectives are detailed in interchange and transfer principles with Metro users as the focus for access and modal integration. It is noted that some pedestrian service levels are reliant on City of Sydney actions to de-clutter adjacent pedestrian footpath areas.	Not applicable					

					For completion by Sydney Metro			
ID	Requirement / Condition	Rating	Reason for Rating	Significance	Response / Comments	Action	Status	Category
(1)	The contents of the Interchange Operations and Maintenance Plan (IOMP) and operational management provisions for future operational requirements, including maintenance, security and management responsibilities.	Satisfactory	The IOMP has been taken into account including operational requirements, asset documentation, management provisions and responsibilities to inform operations and maintenance access requirements.	Not applicable				
E92 (cont.)	The Interchange Access Plan(s) must be prepared in consultation with the Traffic and Transport Liaison Group (TTLG) and the Design Review Panel and must be supported by traffic and transport analysis. Where necessary, consultation must also be undertaken with major landholders adjoining station precincts. The Plan(s) must detail a delivery and implementation program which must be provided to and agreed by the Secretary before commencement of permanent above-ground facilities at any station site.		The IAP has undergone various levels of consultation with stakeholders including TfNSW Greater Sydney Division (formerly RMS), City of Sydney, Emergency Services including Fire and Rescue NSW, EuroTowers Body Corporate, Customer Journey Planning and others including and/or as part of the TTLG and DRP. The IAP action plan details a program for delivery and implementation of the works required for the interchange including investigations of certain matters.	Not applicable				

					For completion by	[,] Sydney M	letro	
ID	Requirement / Condition	Rating	Reason for Rating	Significance	Response / Comments	Action	Status	Category
E93 (a)	In developing the Interchange Access Plan(s), the Proponent must consider: Traffic and accessibility design requirements.	Satisfactory	Traffic and accessibility design requirements were based on such legislation as Disability Discrimination Act, Disability Standards for Accessible Public Transport as well as relevant Australian Standards and TfNSW / Austroads guidelines.	Not applicable				
(b)	Station Design and Precinct Plan(s) required by Condition E101.	Satisfactory	The IAP and Station Design and Precinct Plan (SDPP) are being developed in conjunction with one another and give consideration to each other in their ongoing refinement, eg. the SDPP highlights urban outcomes within the Pitt Street Precinct and the potential for wider place improvements, the IAP demonstrates urban and place making outcomes by identifying a new plaza that facilitates safe and comfortable movement through to interchange facilities, and the SDPP identifies pedestrian amenity and the kerbside facilities required to bring about an integrated customer journey.	Not applicable				

ADDITIONAL MISCELLANEOUS REVIEW FINDINGS

It is considered that the Pitt Street Station IAP has been prepared to an adequate standard and generally covers the relevant Conditions with respect to traffic and transport access. Notwithstanding, the following additional, miscellaneous issues are noted:

• A number of 'actions' in Sections 10.1 and 10.2 are stated as requiring 'investigation' of matters, eg. C3, W9, W10. It is unclear how these are to be actioned into meaningful deliverables. Action C3 ("Investigate an alternative bike parking location which provides close access to the Castlereagh Street cycleway") references 2024 for completion and it is assumed that this timing relates to the completion of the Metro station and the start of station services. Actions W9 (related to de-cluttering footpaths surrounding the proposed Metro station to increase pedestrian space) and W10 (related to removing general traffic from Park Street and widening the footpaths through a reduction in the number of traffic lanes) reference 2028 for completion, which would be after the Metro station is operational and may adversely impact on pedestrian levels of service.

It is acknowledged that some of these investigation items will inform delivery programs as part of other projects (eg. OSD) that will enable the progressive improvement of the wider Pitt Street Station Precinct and that their delivery may not be specifically required for the initial satisfactory operations of Sydney Metro at Pitt Street Station.

- For Actions B2.1 and B2.2, there is the same timeline (2021 to 2024) for the review and implementation actions, which may impact on the timing of the latter.
- For Action R1 (*"Undertake a review of speed limits on all roads immediately surrounding Pitt Street Station"*), it is unclear how this may be implemented downstream, especially the timing, which may affect operations once the Metro station is operational.
- Action W6 ("Install red turn arrow to separate pedestrians and turning vehicles for the right-turn movement from Pitt Street (south) into Bathurst Street (east) and the left-turn movement from Bathurst Street (west) into Pitt Street (north)") and part of Action W7 ("Install red turn arrow to separate pedestrians and turning vehicles for the right-turn movement from Bathurst Street (west) into Castlereagh Street (south)") appear to have already been implemented.
- In the table on *page 14* of the IAP, there is an incorrect reference to "North Sydney Council" as the organisation rather than 'City of Sydney'.

If you have any queries with respect to the above, please do not hesitate to contact the undersigned.

Yours faithfully,

ALAN SAMSA Fellow, Institute of Engineers Australia (FIEAust) Chartered Professional Engineer (IEAust): NPER (1151361) APEC Engineer – International Professional Engineer (Aust) Fellow, Australian Institute of Traffic Planning & Management (FAITPM) Certified Transport Planner (CTP) – Member Institute of Transportation Engineers (ITE) TfNSW Accredited Road Safety Auditor: Level 3 Lead Auditor